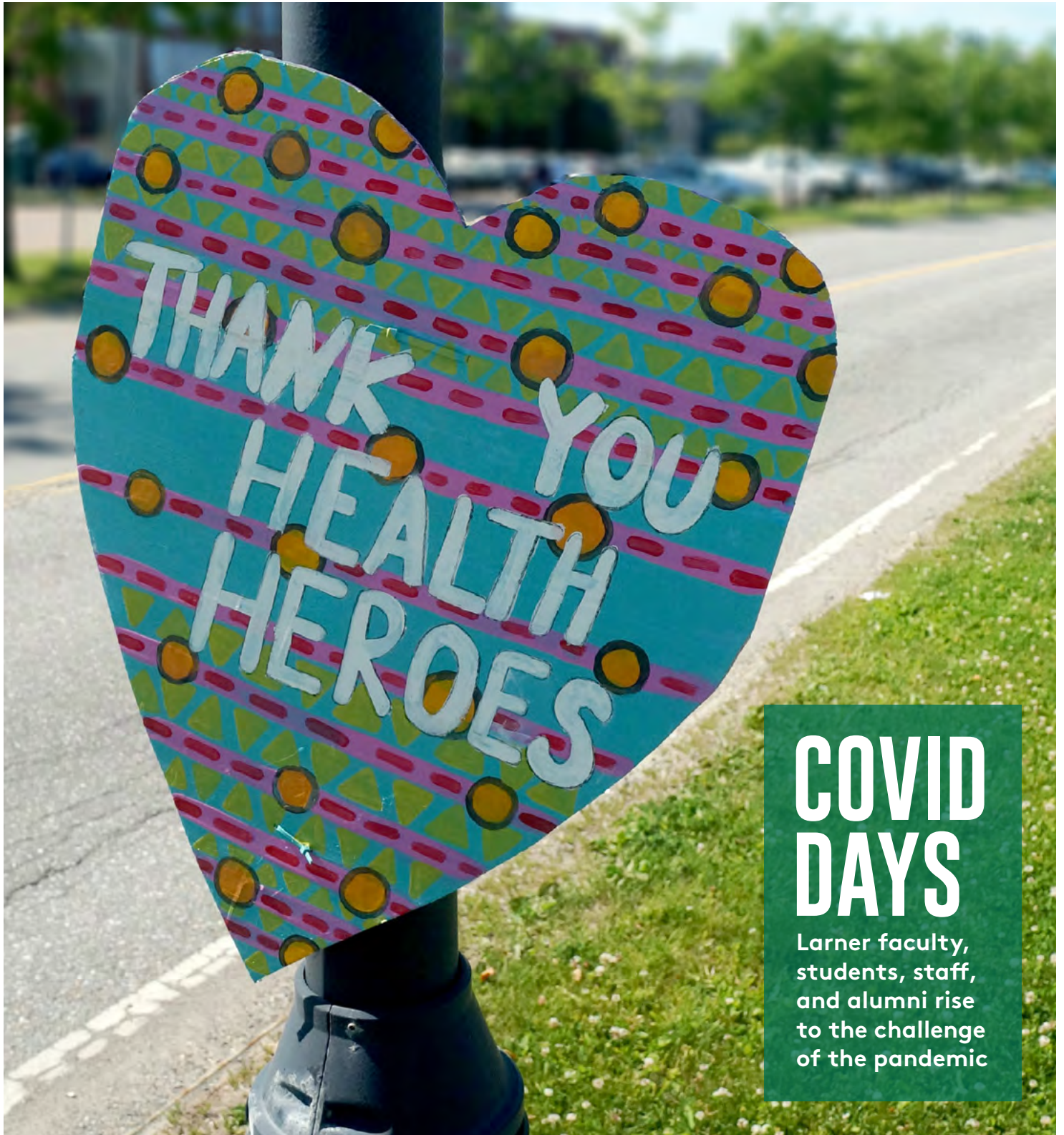


# VERMONT MEDICINE

THE ROBERT LARNER, M.D. COLLEGE OF MEDICINE AT THE UNIVERSITY OF VERMONT

SUMMER 2020



## COVID DAYS

Larner faculty, students, staff, and alumni rise to the challenge of the pandemic

ALSO FEATURED: INTERNATIONAL RESEARCH • ONLINE GRADUATION FOR THE CLASS OF 2020





John Beamis, M.D.'70, at far left, with classmates at their 45th Medical Reunion

## Honoring a Friend and Classmate

JOHN BEAMIS, M.D.'70, remembers JAMES GREEN, M.D.'70, as a kind and generous friend with a dry sense of humor. With several other medical students, they shared a house on Mansfield Avenue and kept in touch over the years as their careers took them to different parts of the country. Green moved to the San Francisco area to practice obstetrics and gynecology, while Beamis headed to the Lahey Clinic in Massachusetts where he would spend three decades

as a pulmonologist. After Green died in 1993 from pancreatic cancer, Beamis wanted to honor his classmate and give back to the College of Medicine. The James R. Green, M.D.'70 Memorial Scholarship is designated for fourth-year students pursuing a career in obstetrics and gynecology, with preference for those interested in completing an OB/GYN rotation at University of California San Francisco, where Green was a clinician, professor, and director of the obstetrics unit at San Francisco General Hospital. Green and Beamis spent time on the UCSF OB/GYN service their final year of medical school, so it's a fitting tribute and a worthwhile opportunity for Larner students. For Beamis, his medical school years set the stage for the rest of his life. "I enjoyed the camaraderie and made lifelong friends," he says. "The medical education we received was excellent, including the emphasis on compassionate patient care. It has served me well over the years."



The University of Vermont  
LARNER COLLEGE OF MEDICINE

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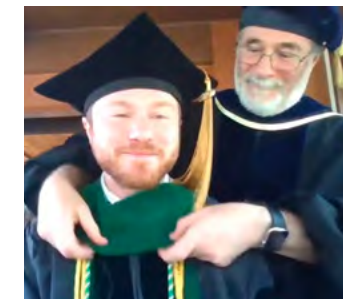
Anne Dougherty, M.D., and Sarah Heil, Ph.D., along with a team of Ugandan colleagues, adapted an intervention used in Vermont to understand how women in Nakaseke, Uganda, might reduce unintended pregnancies.

BY SARAH ZOBEL

## WEB EXTRAS

See more online at [med.uvm.edu/vtmedicine/web-extras](http://med.uvm.edu/vtmedicine/web-extras) including videos, photos, and blog posts.

Read more Larner COVID-19 stories at: [go.uvm.edu/larnercovidstories](http://go.uvm.edu/larnercovidstories)



7



40



10



37



24

On the Cover: A handmade sign affixed to a lamp post across the street from the Larner College of Medicine and the UVM Medical Center—just one of thousands of such signs of appreciation for health care workers seen across the country during the COVID-19 crisis.







When the last issue of *Vermont Medicine* went to press in April, we were in the midst of The Surge—the intense, awful rise of COVID-19 cases that afflicted our nation, particularly in urban areas in the Northeast, Midwest, and Northwest. Now, another season has passed, and cases are again increasing in other regions of the U.S. We have learned a lot about the disease in the last several months; but we have also seen how much we do not know, and how political and social divides play into the spread of the pandemic.

At the Larner College of Medicine, reaction to this greatest medical challenge in a century has affected all our missions. Rapid onset has begotten rapid change. Our faculty, students, and staff have shown how nimbly we can adapt our educational methods in this time of physical distancing, how innovative we are in our research laboratories, and how vital our care is to patients in the face of a complex and novel disease. We have also seen how inextricably linked we are to our community, both here in Vermont and in the wider world. This magazine is an attempt to show a sampling of our efforts, and the effect our alumni have had across the nation during this crisis.

At the same time as we deal with the pandemic, we have been forced, all too belatedly, to address the enduring systematic racism engrained in our society. This has advanced a dialog on our campus, just as it has opened up the national conversation on race. I am proud that, as you can read about here, our own students have led the way in a nationwide effort to ensure that participation in necessary social action never becomes a barrier to a medical career.

This past season has been a time of loss for so many, and that loss has been felt here on our campus too. In late June, we were saddened by the sudden death of one of our own students, Collins Oguejiofor from the Class of 2022. The tragic loss of such a kind and gentle soul as Collins rocked our community, but also brought us together in groups large and small to recognize Collins’ individual contributions, the gap his passing leaves, and the value of the ongoing support we must provide for each other.

As we look toward the fall, and the start of a new school year, much remains in flux. We will still welcome the Class of 2024 to campus, all the while providing modifications and adjustment of group size and spacing to allow for a safe environment. Although we wish we could host reunion as before, we recognize that this year’s reunion must make use of technology, since we cannot meet in person. We do what we need to do for now, to keep ourselves, our loved-ones, and our communities safe; but I look forward to that time, hopefully in the not-too-distant future, when these challenging days will be behind us, and we’ll be back together, face-to-face.

**RICHARD L. PAGE, M.D.**  
Dean, The Robert Larner, M.D. College of Medicine at The University of Vermont

VERMONT MEDICINE

- THE ROBERT LARNER, M.D. COLLEGE OF MEDICINE AT THE UNIVERSITY OF VERMONT
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Wallace Elected to American Academy of Arts & Sciences

The American Academy of Arts & Sciences has elected University of Vermont Professor of Microbiology and Molecular Genetics Emerita **Susan Wallace, Ph.D.**, to its membership, in recognition of her status as a world leader in the sciences. Wallace joined 275 new members elected on April 23, 2020. Wallace, who served as chair of UVM’s Department of Microbiology and Molecular Genetics for 30 years before her retirement in 2018, is the author of more than 200 biomedical journal articles. She has received more than 47 years of consistent National Institutes of Health funding for research exploring the fundamental DNA repair mechanisms involved in the development of cancer, as well as the effects of radiation damage to the genome.

See the list at: [amacad.org/new-members-2020](http://amacad.org/new-members-2020)

COLLEGE CELEBRATES 2020 PROFESSIONALISM AWARD RECIPIENTS

On May 29, 2020, Dean Richard L. Page, M.D., announced the inaugural Dean’s Awards for Professionalism, an affirmation of the college’s commitment to uphold “the highest standards of professionalism” demonstrated through integrity, accountability, compassion, altruism, and social responsibility, and daily interactions guided by cultural humility, kindness and respect.



**DEAN’S FACULTY AWARD FOR PROFESSIONALISM:**  
**Jennifer Gilwee, M.D. '97,**  
*Assistant Professor of Medicine and Chief of the Division of Internal Medicine*

A longtime champion for compassionate, respectful, socially responsible care, Gilwee demonstrated an extraordinary level of professionalism and leadership in response to care needs associated with the Birchwood Terrace Rehabilitation and Healthcare facility’s COVID-19 outbreak. She rapidly organized additional support for Division of Geriatrics providers.



**DEAN’S STAFF AWARD FOR PROFESSIONALISM:**  
**Eric Gagnon,** *Director, Facilities Administration and Projects*  
Recognized for his exemplary ability to consistently demonstrate respect for all colleagues, Gagnon has shown extraordinary commitment to the public as a Colonel and Commander of the Garrison Support Command in the Vermont Army National Guard. He recently played a major role in designing, building, and staffing a 400-bed State of Vermont Alternate Healthcare Facility.



**DEAN’S STUDENT AWARD FOR PROFESSIONALISM:**  
**Isaac de La Bruere '22**  
Described as a natural leader and encouraging mentor, de la Bruere is recognized for consistently welcoming new members into the Larner College of Medicine community and providing trustworthy guidance and support to colleagues. Isaac is the founder of the UVM Minority Association of Premedical Students club and a leader in the College’s Student National Medical Association chapter.



Students’ Response to the Pandemic

26+ DIFFERENT PROJECTS

37,983 PIECES OF PPE COLLECTED

151+ MEDICAL AND GRADUATE STUDENTS VOLUNTEERS



Notable



and chair of biochemistry (right)—were named UVM Graduate College University Scholars for the 2020-21 academic year. They are two of four UVM faculty members recognized for sustained excellence in research, and creative and scholarly activities.

### HOLMES AND STEIN NAMED 2020-21 UVM UNIVERSITY SCHOLARS

Two Larner College of Medicine faculty members—**Gregory Holmes, M.D.**, professor and chair of neurological sciences (left), and **Gary Stein, Ph.D.**, Perelman professor



### GALLANT RETIRES AFTER 14 YEARS LEADING ADMISSIONS

After welcoming more than a thousand medical students into the Larner College of Medicine over the course of the last 14 years, Associate Professor of Radiology and Pediatrics **Janice Gallant, M.D.**, stepped down from her position as Associate Dean for Admissions, effective July 1, 2020. She has been succeeded on an interim basis by Nathalie Feldman, M.D., assistant professor and associate residency program director in UVM’s Department of Obstetrics, Gynecology and Reproductive Sciences.



### FIRST SELECTED AS DISTINGUISHED EDUCATOR

**Lewis First, M.D.**, professor and chair of pediatrics, has been selected as one of 16 distinguished educators to serve in the Academic Pediatric Association’s new honorary service academy, the National Academy of Distinguished Educators in Pediatrics (NADEP). Members of NADEP will serve as topic experts for academic institutions; national peer reviewers for educational credentials of pediatric faculty; mentors/coaches for junior faculty; and as a think tank to set future directions in pediatric education.



### BATES RECOGNIZED FOR PIONEERING RESEARCH BY AMERICAN THORACIC SOCIETY

Professor of Medicine **Jason Bates, Ph.D., Sc.D.**, has been named the 2020 recipient of the Solbert Permutt Trailblazer Award in Pulmonary Physiology and Medicine by the American Thoracic Society Assembly on Respiratory Structure and Function. The award honors an established investigator who has done pioneering research in the area of respiratory structure and function and has guided and inspired others in the field.



### JEMISON RECEIVES AAMC GIR SERVICE AWARD

**Jill Jemison**, assistant dean for technology/chief information officer, received the 2020 Service Award from the Association of American Medical Colleges (AAMC) Group on Institutional Resources (GIR) in recognition of her “significant and long-lasting impact in the field of academic medical center information technology, and to the GIR community.”

### Students Push for Advocacy Protection

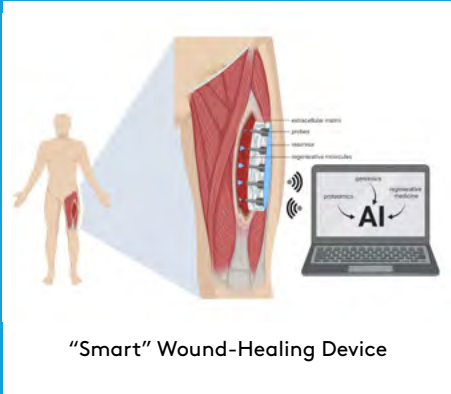
Medical students at the Larner College of Medicine led a national movement in June to appeal to key national medical education organizations to advocate for a change in assessing a record of arrest stemming from social justice-related protesting.

This issue gained in visibility this spring with the increased focus on the Black Lives Matter movement. Protesters asserting their right to free speech and advocacy run the risk of arrest, and such an arrest in the past could cloud a person’s application to medical school and residency programs. Larner students built a coalition of eight national student organizations, and crafted a letter signed by thousands of student supporters that was sent to the members of the Association of American Medical Colleges (AAMC), Accreditation Council for Graduate Medical Education (ACGME), and American Association of Colleges of Osteopathic Medicine (AACOM). On July 7, both the AAMC and AACOM released statements in support of the students’ request. The AAMC’s statement encouraged “selection committees in undergraduate and graduate medical education to conduct a holistic review of applicants and consider each individual in the context of their attributes and lived experiences and the institution’s mission.”

In a posting on the Larner blog, **Luke Higgins ’22** wrote: “I am privileged to attend a school that fosters and elevates key discussions, such as a recent discussion around how our college can more effectively recruit persons taking action to seek a more just world.”

Read Luke’s post at: [uvmmedicineblog.wordpress.com](https://uvmmedicineblog.wordpress.com)

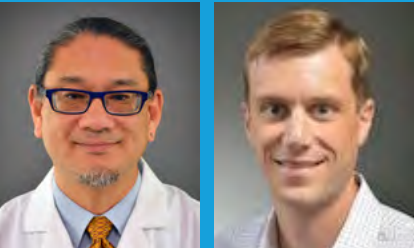
UNIVERSITY OF PITTSBURGH MEDICAL CENTER



“Smart” Wound-Healing Device

### ‘SMART’ DEVICE TO REGROW MUSCLE TISSUE FOCUS OF GRANT

**Gary An, M.D.** (left), professor of surgery, and **Robert Chase Cockrell, Ph.D.** (right), assistant professor of surgery, received a \$2.8 million four-



### The project aims to develop a device combining artificial intelligence, bioelectronics, and regenerative medicine

year grant as co-investigators on a \$22 million Defense Advanced Research Projects Agency-supported initiative led by the University of Pittsburgh. The project aims to develop a device combining artificial intelligence, bioelectronics, and regenerative medicine to regrow muscle tissue, especially after combat injuries.

In addition to An and Cockrell, researchers at Carnegie Mellon University, Northwestern University, Rice University, University of Wisconsin and Walter Reed National Military Medical Center also are part of this initiative.

“My research shows that the biggest knowledge gaps for providers relate to history. We have to know our own history to be able to understand the pain and trauma communities have endured for hundreds of years.”

– Excerpted from a blog post titled “Health and Racial Disparities in COVID-19,” by Maria Mercedes Avila, Ph.D., associate professor of pediatrics and director of Vermont Leadership Education in Neurodevelopmental Disabilities (LEND)



Adam Atherly, Ph.D.

Notable

### Atherly Receives Robert Wood Johnson Grant to Study Community Health Teams

A new, three-year \$500,000 grant from the Robert Wood Johnson Foundation will allow members of the UVM Center for Health Services Research (CHSR), led by center director and Professor of Medicine **Adam Atherly, Ph.D.**, to explore the effectiveness of community health teams in improving the quality and efficiency of health care delivery. Community health teams are composed of nurses, social workers, dietitians, substance abuse counselors, and other roles—all designed to provide services beyond those typically encountered in a doctor’s office.

“In many cases, a patient’s medical problem is linked to underlying behavioral or environmental situations,” said Dr.

Atherly. “it could be an economic problem, for example, where what’s really vital for a long-term solution is for that person to be connected to community resources for housing or food. There’s no drug or surgery that’s going to help that person. That’s where community health teams come in.”

Researchers will be using community-based focus groups and other surveys, and extensive analysis of de-identified electronic health record and insurance claim data. The CSHR, which Dr. Atherly founded in 2018, is well-poised to lead this work, and will also bring in partners from across the University, such as Senior Associate Dean for Public Health and Health Policy Jan Carney, M.D., M.P.H.





Notable

### Cushman Receives AHA Meritorious Achievement Award

Over the last three decades, Professor of Medicine **Mary Cushman, M.D., M.Sc.**, has emerged as a national leader in cardiovascular health.

But the journey hasn't been easy—she's had to overcome more obstacles than most of her male counterparts.

"I've learned we're not gender blind," said Cushman, a hematologist at the UVM Medical Center and UVM Cancer Center member. "It's nobody's fault. Unconscious biases are just baked into you. But as we create a pipeline of future leaders, we have to make sure women in science overcome these biases and have every possible opportunity to grow their careers."

Cushman's contributions to the American Heart Association (AHA) in this area are why she's the recipient of the AHA's 2020 Award of Meritorious Achievement.

She will be honored with the award, which recognizes individuals who have rendered an important service to the AHA, during the association's live stream event in October.

Cushman, who has worked on dozens of AHA committees, co-authored countless papers and won a case full of awards, has made far-reaching contributions on the local, regional and national levels. They include service as chair of council operations and as a national board director.

Currently, she is chair of the Go Red for Women in Science and Medicine Task Force, where she pilots programs to help women better understand their risk for heart disease.

"Volunteering with the AHA has been one of the best parts of my career," she said. "I can't say enough about how it helped me develop my own skills as a scientist, grow as a leader and connect with other people who have a passion for preventing heart disease and stroke."



### KING NAMED ASSOCIATE DEAN

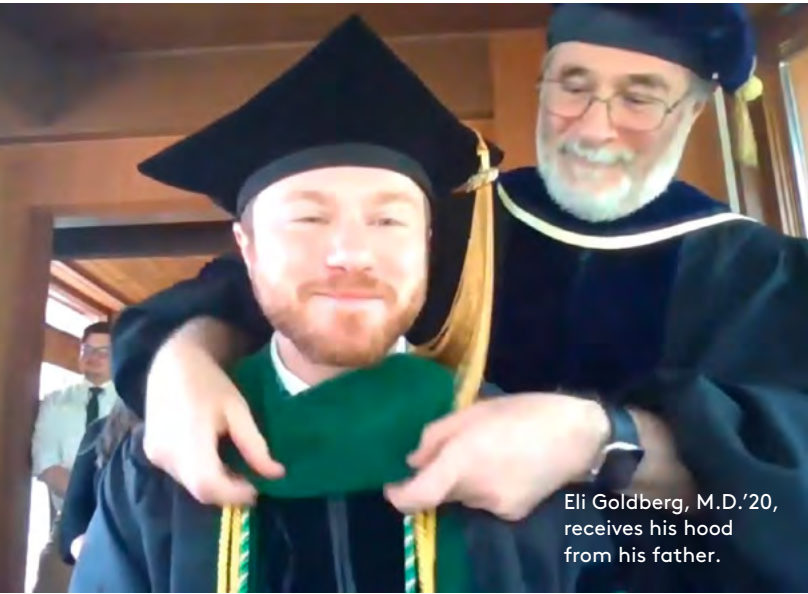
**John King, M.D., M.P.H.** (above), professor and vice chair for academics and regional development in the Department of Family Medicine, has been appointed associate dean for continuing medical and interprofessional education (CMIE). The Office of Continuing Medical and Interprofessional Education provides a broad spectrum of accredited continuing education opportunities for physicians, nurses, and other health care professionals. The office's programs provide lifelong learning experiences for maintenance of certification and to enhance medical knowledge, performance, and patient-related outcomes. King replaces Cheung Wong, M.D., Berta Pi-Sunyer Williams '58 Endowed Professor in the Department of Obstetrics, Gynecology and Reproductive Sciences, who served as associate dean from 2011 to 2019, and became associate vice president for clinical affairs at the UVM Health Network Group in 2018.

A graduate of the SUNY College of Environmental Science and Forestry and the University of Rochester School of Medicine and Dentistry, King completed his residency in family medicine at Duke University and obtained a Master of Public Health degree from the University of North Carolina. He has been a member of the faculty since 2004 and was responsible for the successful development of the Family Medicine Residency Program at Champlain Valley Physicians Hospital in Plattsburgh, N.Y.

Commencement

### What Kind of Doctors Are We Going to Be?

On May 17, 2020, students and faculty gathered via Zoom technology to celebrate Commencement for the Class of 2020 amidst the COVID-19 pandemic. The class chose as its student speaker **Eli Goldberg, M.D.'20**, who gave his vision of the special circumstances ahead.



Eli Goldberg, M.D.'20, receives his hood from his father.

*Good afternoon, Class of 2020!* It is an incredible honor to be coming to you live from my parents' living room as the official halftime show performer of the 2020 Larner College of Medicine Commencement Ceremony. If you need to grab a snack, walk the dog, or reset your router, you've got about 5 minutes...

I've been combing through a thesaurus, looking for the right words to describe this surreal, thrilling, bittersweet, joyful, poignant, totally upside-down moment in our lives. I wish with all my heart that we were together in Ira Allen Chapel right now. And yet, even though this is not how we dreamed that medical school would end, I couldn't be more inspired by the accomplishments of our class. We've really been on an amazing journey together.

Although our celebration is virtual, the hard work that got us here was very real. Let me give you a lightning recap:

We made it through the MCAT, AMCAS, and MMIs. We passed FoCS, A&D, NMGI, CRR, and HDRH, PCR and DIV. We learned to interpret EKGs, ABGs, CTs and MRIs. Our SPs taught us to gather an HPI and ROS, to listen at APTM and document RRR, no MRG, CTAB. We passed the USMLE! We rotated through IM, FM, the OR, L&D, the ED, and two AIs. We learned to manage CHF and COPD, AAAs and IBD, MVAs and AMS. We entered our CVs into VSAS and ERAS. And finally, we made it to MD.

To the family and friends who are watching right now, that probably sounded like a lot of gibberish. But you know how much learning and growth those acronyms represent. This has been an intense journey for you too. You've made huge sacrifices to support us, and through it all, you've looked at us and seen future doctors—even when sometimes we had trouble seeing it ourselves. We wouldn't be wearing these gorgeous gowns today if not for you.

Many incredible faculty and staff have also been with us every step of the way. Our lecturers and TBL facilitators, advisors and preceptors, residents and attendings, librarians and deans, OMSE and COMIS, standardized patients and sim lab staff have worked tirelessly and generously to help us become the best doctors we can be.

The path to get through medical school is tough, but at least it's predictable. Our course of training is mapped out in detail, years in advance. We progress through a rigid sequence of courses and standardized clinical experiences. It's always clear what comes next, what to expect.

**Can we rise to this challenge, and the challenges to come, to be the kind of doctors that the world needs?**

Now, we're graduating into a moment where nothing is predictable, and no one knows quite what to expect. This year, the normal uncertainty of starting residency seems to be amplified a hundredfold. As young doctors we'll be facing things we've never faced before—at the same time as the entire medical system faces something it's never faced before. First Aid for the USMLE doesn't have a mnemonic for starting residency during a viral pandemic. (Trust me, I checked.)

We all chose to become doctors. And now that we are, we have a deeper choice to make: what kind of doctors are we going to be? I don't mean that in the narrow sense of specialty, but in the sense of the presence and principles that we bring to our work. Can we rise to this

challenge, and the challenges to come, to be the kind of doctors that the world needs?

Every day for the past four years—as we've gone from memorizing the brachial plexus to assessing cardiac emergencies in the ED—I've been inspired, comforted, and energized by the folks in our class. And when I look at us today—at least, those of us who have our webcams on—it brings me so much hope to think about this amazing cohort of doctors heading out into the world.

Because this is what kind of doctors I see: I see doctors with integrity, persistence, and heart. I see doctors who are curious, critical, and creative. I see doctors who can stay grounded in an unstable situation, and find their moral compass when answers are unclear. I see doctors who are strong in themselves, yet humble enough to change and grow. I see doctors who are committed to serving others, and who have the passion to change lives.

In fact, we already have changed lives. So one last thing before the orchestra cuts me off: right now, think of a moment in med school when you made a difference for a patient. Remember their face, the thing you said, the way they looked at you, the feeling in your heart. Hold onto that memory, and when intern year starts to get real, remember that you are so much more than your fatigue, your mistakes, or your stress. That person, who your patient saw that day, is the kind of doctor you are.

So, Class of 2020, thank you for an amazing four years together, for everything you've taught me, and for everything you are and will be. To borrow a line from David Foster Wallace's famous commencement speech: I wish you way more than luck. **VM**

Spotlight

**Raghav Goyal '22** is an Albert Schweitzer Fellow for Life who first conducted a project involving Burlington's homeless community during his second year of medical school. He shares his perspective on life in the homeless community, as well as an interview with Ronni Pearlman, a community member with a lived experience of homelessness who volunteers for several organizations in Burlington.

**"My understanding of homelessness has built over the last three years here in Burlington, Vt., and has revealed, for me, some basic truths: Homelessness is a transient condition that many people go in and out of; not everyone has mental health or substance abuse issues; and the people in the homeless community are unbelievably diverse in age, nationality, race, political bent, and education, with stories you would never anticipate."**



Read the blog post from Ronni and Raghav at: [uvmmedicineblog.wordpress.com](http://uvmmedicineblog.wordpress.com)



Commencement

# “A World That Needs You:” Celebrating the Class of 2020

The ceremony began traditionally, with “Vermont Passacaglia,” the Larner College of Medicine’s alumni-composed processional. But instead of graduates and faculty marching into Ira Allen Chapel, a slideshow of photos depicting the Class of 2020’s medical school journey played on the screens of viewers in remote locations across the country and globe.

“Today we send you out into a world that needs you,” said Larner College of Medicine Dean Richard L. Page, M.D., as he welcomed new physicians in the Class of 2020 on Sunday, May 17, 2020, through the most extensive live online commencement ceremony held at a medical school during the coronavirus pandemic.

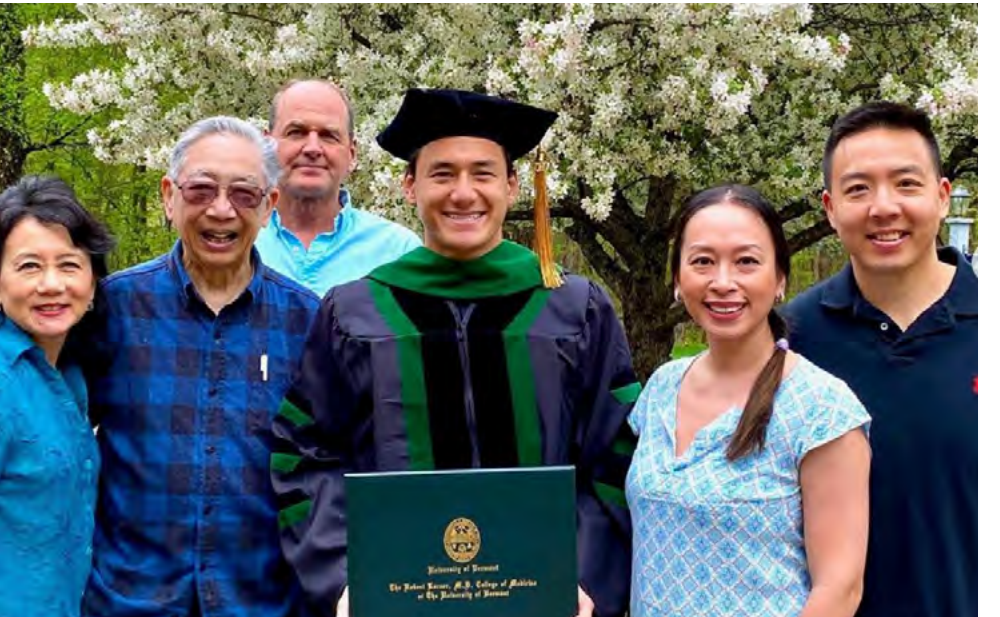
Joined by more than 100 medical graduates, Page, College of Medicine leaders, and guest speakers were connected via Zoom webinar videoconferencing while friends and family members watched a livestream of the ceremony on YouTube.

The event featured several highlights, including a stirring rendition of “America the Beautiful” by Class of 2020 graduate Nana Agyepong, M.D., who sang from

her home in Connecticut. In addition to remarks from Page, Senior Associate Dean for Medical Education Christa Zehle, M.D., former Larner staff member Mike Cross, and Stephen Leffler, M.D., president and chief operating officer of the University of Vermont Medical Center and Class of 1990 College of Medicine alumnus, graduates and viewers heard a Commencement address by Joia Mukherjee, M.D., M.P.H., chief medical officer of Partners in Health, and associate professor of global health and social medicine at Harvard Medical School. Mukherjee discussed the important role of context, team and love—through the lens of the pandemic—in providing important perspective to individuals in the healing profession.

“It is adversity that makes a doctor a healer,” she said to the graduates, urging them to recognize and address health disparities, understanding that “zip code will define, in large measure, who lives, dies.” And she told the new physicians that “At those final moments when a patient is faced with the end, that is when your presence and your love can heal.” VM

Celebratory snapshots before, during, and after the College’s Zoom graduation.





THE

PAND

TRUE STORIES OF OUR BATTLE

EMIC

AGAINST COVID-19

We had not seen it for a hundred years:  
*a global outbreak so pervasive and virulent that it  
brought normal life across the world to a standstill.*

When COVID-19 swept across this country in March, Lerner faculty, students, staff members, and alumni across the country went into action in all the areas served by the College's missions. The following pages offer a broad look at their response to that call to service ▶



Jason Bates, Ph.D., leads the effort to develop the Vermontilator.



## Bates and Vermont Team Invent Simplified Ventilator

### RESEARCH

A team of UVM scientists, engineers and doctors have developed a new design—and built a working model—for a simple, inexpensive ventilator, affectionately called the “Vermontilator.”

Jason Bates, Ph.D.—a professor in both the Larner College of Medicine and College of Engineering and Mathematical Sciences—has been researching the kind of lung damage that occurs during illnesses like doctors are now seeing in COVID-19 patients for more than fifteen years. He leads the effort to develop the Vermontilator.

**THE UVM TEAM’S APPROACH USES AN ALTERNATIVE MODE OF HELPING CRITICALLY ILL PATIENTS BREATHE. IT’S CALLED “AIRWAY PRESSURE RELEASE VENTILATION” OR APRV.**

Unlike other improvised emergency ventilator designs, the UVM team’s approach uses an alternative mode of helping critically ill patients breathe. It’s called “airway pressure release ventilation” or APRV.

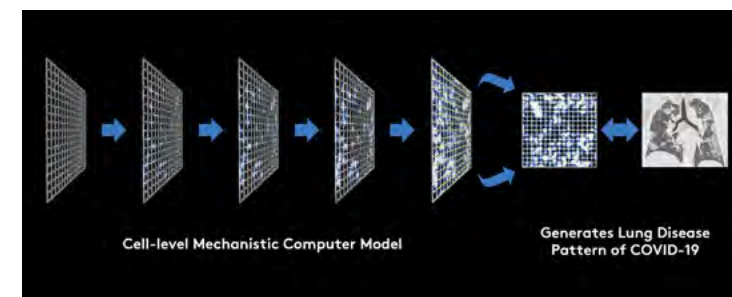
This APRV approach may be particularly useful for patients suffering with the new virus. “One of the main complications from COVID-19 is called acute respiratory distress syndrome, a disease where the lungs fill up with an inflammatory fluid,” explains

Anne Dixon, M.D., professor of medicine. “Many of these patients end up being dependent on a ventilator for fairly prolonged periods.”

The new ventilator could help these patients by inflating their lungs using long inspirations of air, which are held inflated at a constant and relatively high pressure, Bates explains. Then “at regular intervals, short expirations are allowed during which the lungs expel carbon dioxide,” he says. The APRV approach is the opposite of a normal breathing pattern—and may allow patients with COVID-19 to avoid, or reduce, the lung damage associated with the disease and with extended periods on a ventilator.

Unlike a traditional ventilator—a very complex piece of equipment that can cost more than \$25,000—the Vermont-built machine was quickly assembled out of a commercially available motor that drives a rotating disk, conventional medical hoses, and other relatively simple parts, through collaboration with the team at UVM’s IMF Labs. As the COVID-19 pandemic continues to evolve, Bates sees resource-poor areas of the world experiencing severe shortages of healthcare facilities and equipment benefitting from the Vermontilator.

“Seeing the Vermontilator project come together from inception to realization so quickly, thanks to the enthusiasm and commitment of so many people, has certainly been one of the most gratifying experiences of my professional life,” says Bates.



Screenshots from a computer modeling simulation of COVID-19 lung injury

## Computer Modeling Helps Researchers Battle COVID-19

### RESEARCH

Bright blue and white lights pulse across the grid of black squares like fireflies. While reminiscent of a summer night’s sky, the video images are actually a computer model of pulmonary inflammation that UVM Professor of Surgery Gary An, M.D., retooled to depict a COVID-19 cytokine storm. He posted it on Twitter, where scientists worldwide have been sharing ideas to identify potential treatments for the virus.



Gary An, M.D.

An has nearly 20 years of experience in creating models of sepsis, which like COVID-19, invokes a hyper-inflammatory response called a cytokine storm. In late March, he and Assistant Professor of Surgery R. Chase Cockrell, Ph.D., joined an international coalition of virologists, pharmacologists, and mathematicians led by Indiana University’s Paul Macklin, Ph.D., to help build a SARS-CoV-2 tissue simulator that models the changing behavior of the virus once it enters the body. An has collaborated with Macklin for several years.

The coalition members modeled the underlying mechanisms of COVID-19, “from viral invasion all the way through manifestation of disease,” An said. “The scientific community pretty rapidly identified the various phases of the viral life cycle and found potential drugs that theoretically targeted those various areas.”

The hurdle, however, was a lack of time to test potential treatments using a traditional approach. Conducting “in silico” trials—using computer models that model the mechanisms of the viral infection—allows scientists to explore how those drugs might work and provide insight about treatments.

The SARS-CoV-2 tissue simulator is an open source project, available to the large community of researchers working on COVID-19 projects worldwide on the project website.

## Study Highlights Impact of COVID-19 on Motivation to Quit Tobacco

### RESEARCH

A study from researchers at the UVM Vermont Center on Behavior and Health (VCBH) suggests that, for some, knowledge of COVID-19 is associated with a reduction in cigarette and e-cigarette use, as well as an increase in motivation to quit. The study, published in *Nicotine & Tobacco Research*, is among the first to report changes in tobacco use and motivation to quit using cigarettes and e-cigarettes in response to COVID-19.

In this study, VCBH investigators examined data collected from 345 U.S. adults in an online survey conducted in April 2020. The researchers found that a desire to reduce COVID-19 infection risk prompted nearly a quarter of respondents to reduce their cigarette and e-cigarette use, and more than one-third to increase their motivation to quit. More than 20 percent of respondents reported a quit attempt to reduce risk of harm from COVID-19. These data are consistent with recent Vermont quit line (802Quits) data showing increases in phone and website registrations in March 2020 compared to March 2019.

**MORE THAN 20 PERCENT OF RESPONDENTS REPORTED A QUIT ATTEMPT TO REDUCE RISK OF HARM FROM COVID-19.**

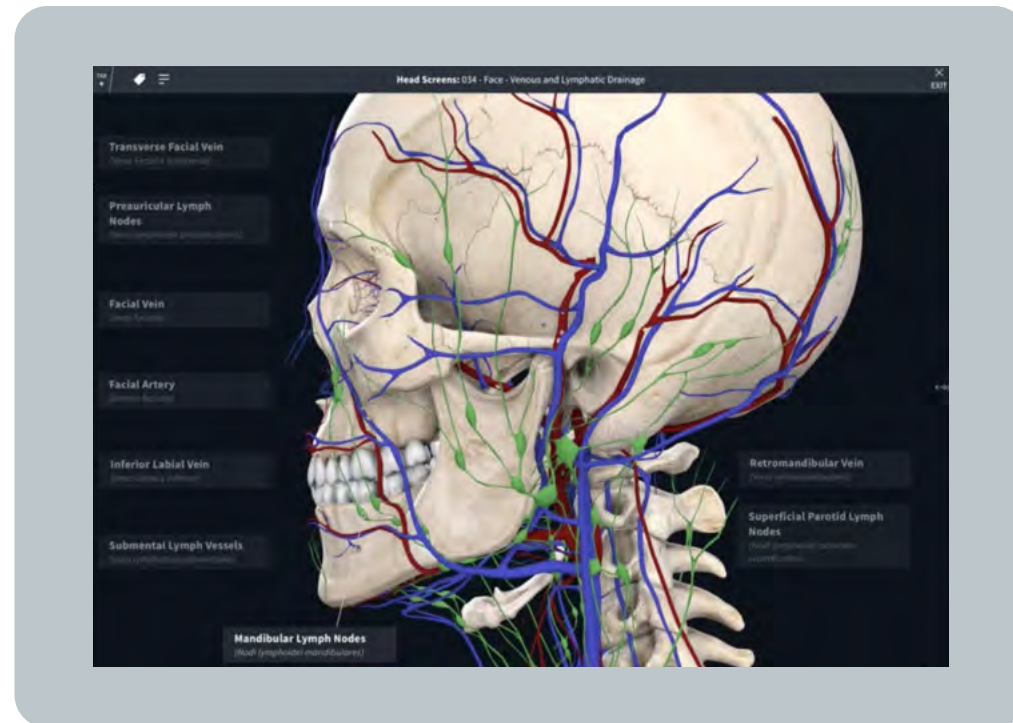


Elias Klemperer, Ph.D.

“These findings demonstrate that some adults who smoke cigarettes and use e-cigarettes are changing in response to the coronavirus pandemic,” said first author Elias Klemperer, Ph.D., a postdoctoral fellow in the VCBH at UVM. “This is important, because quitting cigarettes is often the most important thing you can do to improve your health.”

In addition to Klemperer, co-authors on the study include Julia C. West, B.A., VCBH pre-doctoral fellow, Catherine Peasley-Miklus, Ph.D., VCBH project manager, and Andrea C. Villanti, Ph.D., MPH, associate professor of psychiatry.





## Neurological Sciences Team Creates Virtual Anatomy Course

### EDUCATION

Each summer, dozens of physical therapy and Master of Medical Science graduate students from UVM and beyond come to the Larner College of Medicine for a very hands-on Human Gross Anatomy course. But with in-person instruction prohibited due to COVID-19, faculty members in the Department of Neurological Sciences had to either cancel or develop an alternative plan.

With only six weeks to prepare before the first day of class on June 22, the team, led by Thayer Professor of Neurological Sciences and Director of the Anatomical Gift Program Gary Mawe, Ph.D., got to work to create a comprehensive, inclusive online version of the class.

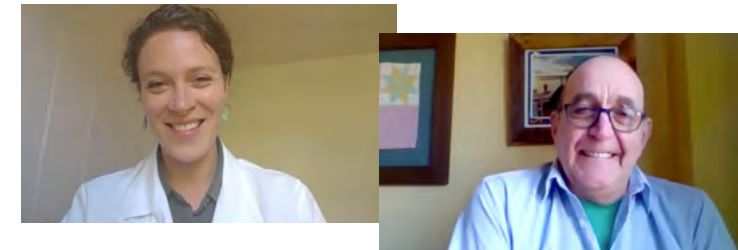
**...A CURRICULUM THAT INCLUDES A COMBINATION OF PRE-RECORDED LECTURES, NEWLY-GENERATED GROSS ANATOMY LAB DISSECTION VIDEOS, A 3D ANATOMY APP CALLED COMPLETE ANATOMY, AND LIVE ONLINE DISCUSSIONS WITH FACULTY MEMBERS.**

First, Mawe took an online course design boot camp, researched several software programs, and consulted—through a listserv hosted by the American Association of Anatomists—with educators at many

other institutions faced with the same dilemma. Following consultation with other course faculty members, he settled on a curriculum that includes a combination of pre-recorded lectures, newly-generated gross anatomy lab dissection videos, a 3D anatomy app called Complete Anatomy, and live online discussions with faculty members.

Faculty members, including Mawe, co-director and Professor Victor May, Ph.D., and Assistant Professors Derek Strong, Ph.D., Nicholas D'Alberto, Ph.D., and Abigail Hielscher, Ph.D., perform the dissections that students would normally do, and record narrated videos. Assistant Professor Nathan Jebbett, Ph.D., edits the videos to include names and information about structures of interest, and related schematic diagrams. Sharon Henry, P.T., Ph.D., A.T.C., professor of rehabilitation and movement sciences emerita, provides most of the lectures on upper and lower extremities. All lecture and laboratory videos are closed-captioned, with ASL translation, as well.

"It's a customized course," says Mawe. "They won't see the biological variability, like size of muscles and variation of arterial branches, that they would normally see in a large anatomy laboratory," he says, "but the faculty are doing their best to get around that by including specimens from the department's collection of high quality dissections that have been saved, with the consent of the donors."



Kalin Gregory-Davis '22 participates in a telemedicine simulation with standardized patient Bob Bolyard.

## Telemedicine: From Bed-side to Web-side

A new course for third- and fourth-year medical students is geared toward telehealth.

### EDUCATION

In just a few short months, the COVID-19 pandemic has spurred countless innovations in medical education, especially at the Larner College of Medicine. Among them, a new course for third- and fourth-year medical students focused on telehealth, a type of care many patients have become accustomed to due to pandemic-related social distancing guidelines.

Developed by UVM Clinical Simulation Laboratory Education Director Cate Nicholas, Ed.D., the asynchronous online course, "Telemedicine: From Bed-side to Web-side," utilizes a 42-session module developed by the American College of Physicians. It also includes a presentation and documents developed and collated by Nicholas with input from Elise Everett, M.D., the level director of the clinical curriculum and associate professor of obstetrics, gynecology and reproductive sciences, to educate students about the intricacies of this increasingly important form of medical care. Topics covered in the presentation include proper attire, physical space, and camera placement; telemedicine security; billing; and physician directed physical exams. Students practice web-side verbal and nonverbal communication skills, how to determine necessary follow-up physical exams, and how to document telemedicine visits during a remote encounter with a standardized patient.

Nicholas says that students will likely be expected to support telemedicine visits during their clerkship rotations and to provide this type of care during their residencies and future medical careers.

Nicholas and Everett have presented the course to various programs and departments at the UVM Medical Center, at several virtual conferences, to the AAMC Directors of Clinical Skills Group, and to the American Medical Association. In the coming months, they hope to work with the UVM Medical Center to formally include students in telemedicine patient visits.

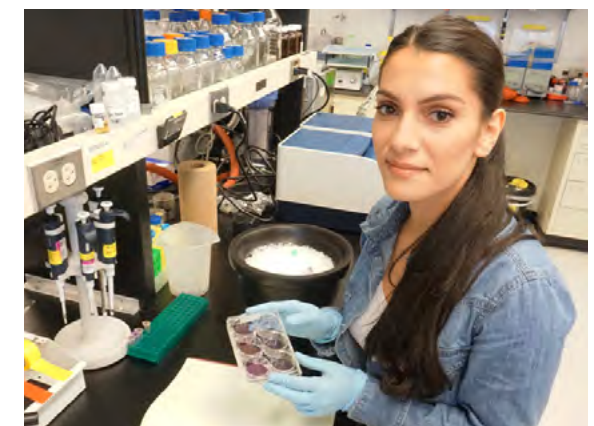
## Hidden Opportunities

### Graduate Education in a Pandemic

### EDUCATION

While much of higher education successfully pivoted to remote learning during the pandemic, graduate education has been faced with a unique set of challenges, particularly for those further along in their training. Doctoral students have had to alter—or in some cases, stop—laboratory research, have been unable to attend important in-person networking events, and seen significant shifts in job prospects both in industry and academia. But riding that wave of change, says Associate Dean of Graduate Education and Postdoctoral Training and Professor of Molecular Physiology & Biophysics Christopher Berger, Ph.D., will, in the end, make them stronger and more resilient scientists. "As they look back on this period, I think they'll find out that they got more from this than they lost," he says, adding that, "with every set of challenges comes opportunity." Cellular, Molecular, and

**"AS THEY LOOK BACK ON THIS PERIOD, I THINK THEY'LL FIND OUT THAT THEY GOT MORE FROM THIS THAN THEY LOST."**



Ph.D. trainee Inessa Manuelyan

Biomedical Sciences Ph.D. trainee Inessa Manuelyan, saw the lab where she works, run by Associate Professor of Medicine Jason Botten, Ph.D., shift its focus exclusively to SARS-CoV-2 research. "I essentially reapplied the goals of my dissertation [the Zika virus outbreaks of 2015 and 2016] to a new virus," says Ms. Manuelyan. "I think being able to very quickly lay the groundwork to shift focus to an undeniable force such as this pandemic is the reality for a lot of virologists and it's a good experience to go through with regards to my training. [The pandemic] has likely solidified my commitment to virology."



# Alumni face the COVID-19 Pandemic

## Flagstaff, Ariz. 1

*"The healthcare providers here have had to work with a severe lack of PPE. NAVMC has created a paradigm shift, helping the hospitals on the Navajo and Hopi Nations move from disposable gowns to reusable cloth gowns... The response has been one of great praise and thanks."*

— JOHN "BULL" DURHAM, M.D. '85, ORTHOPAEDIC SURGEON FOR THE TUBA CITY REGIONAL HEALTH CARE CORPORATION AND FOUNDER OF THE NORTHERN ARIZONA VOLUNTEER MEDICAL CORPS (NAVMC)

## Los Angeles, Calif. 2

*"I was on the family medicine inpatient service in the hospital when COVID-19 started becoming a very real concern. I then transitioned to working in the county ED of one of the large Los Angeles Department of Public Health safety net hospitals...I also helped to mobilize 20 different 3D printers through the Los Angeles Public Library system to help print and distribute face shields where needed."*

— MICHAEL OHKURA, M.D. '18, THIRD-YEAR FAMILY MEDICINE RESIDENT AT UCLA

## Los Angeles, Calif. 4

*"Imbasciani, secretary of California's Department of Veterans Affairs, and his staff are responsible for keeping the novel coronavirus away from the state's eight veterans homes. California's defenses are holding. The explanation, many say, lies in CalVet's intense preparation, quick response, attention to hygiene and leadership, starting with Imbasciani, a physician and retired colonel who not too many years ago could have been discharged from the military because he is gay."*

— FROM A LOS ANGELES TIMES STORY HIGHLIGHTING VITO IMBASCIANI, M.D. '85

## Libertyville, Ill. 3

*"I introduced myself. I'm Dr. Akbarnia, Mr. C. I was the last person you saw in the ER. You told me you trusted us to get you to this side. Looks like you did just fine." He started to cry. He said, 'I remember your eyes.' And I started to cry. What he didn't know is that, at that moment, I realized that we do what we do exactly for people like him, for moments like these. His strength, his kindness, his calming words to me meant everything."*

— HALLEH AKBARNIA, M.D. '98, SPEAKING ABOUT HER EXPERIENCES WITH A COVID-19 PATIENT AS AN EMERGENCY MEDICINE PHYSICIAN AT ADVOCATE CONDELL MEDICAL CENTER

## ALUMNI VOICES

In towns and cities large and small across the country, alumni have been at the front lines of treating patients suffering from COVID-19. They've also been heading up public health efforts, leading major health organizations through uncertainty, and rethinking how they practice medicine to meet the needs of patients at this unprecedented time.

## New York City 5

*"It's been heart breaking, having to call families in the middle of the night to share unthinkable news, knowing they are unable to see their loved ones one last time due to visitation restrictions."*

— HYUNSOO NO, M.D. '19, COMPLETING A PRELIMINARY MEDICINE ROTATION AT FLUSHING HOSPITAL MEDICAL CENTER PRIOR TO RADIATION ONCOLOGY RESIDENCY AT STANFORD

## Portland, Maine 6

*"Practicing as one of four pediatric pulmonologists for the entire state of Maine, and we also serve part of New Hampshire, I think telehealth is a potentially phenomenal tool. We stand to learn a lot about how to reach more families and provide care in real time for our patients in Caribou, which is right on the Canadian border, all the way down to Portsmouth, N.H."*

— ANNE COATES, M.D. '07, PEDIATRIC PULMONOLOGIST AT MAINE MEDICAL CENTER

## Chatham, New Jersey 9

*"A lot of the support that I am providing for my patients is in the form of psycho-education, specifically about resilience. We are in uncharted territories. So stick with the basics of life because the basics right now are more important than ever. Have a regular schedule: don't go to bed too late. Wake up at a reasonable hour. Eat three meals a day. Get dressed every day. These are the small things that make a huge difference. There is a lot of work happening with both the kids and their parents."*

— SETH DORSKY, M.D. '10, CHILD AND ADOLESCENT PSYCHIATRIST IN CHATHAM, N.J.

## Burlington, Vt. 7

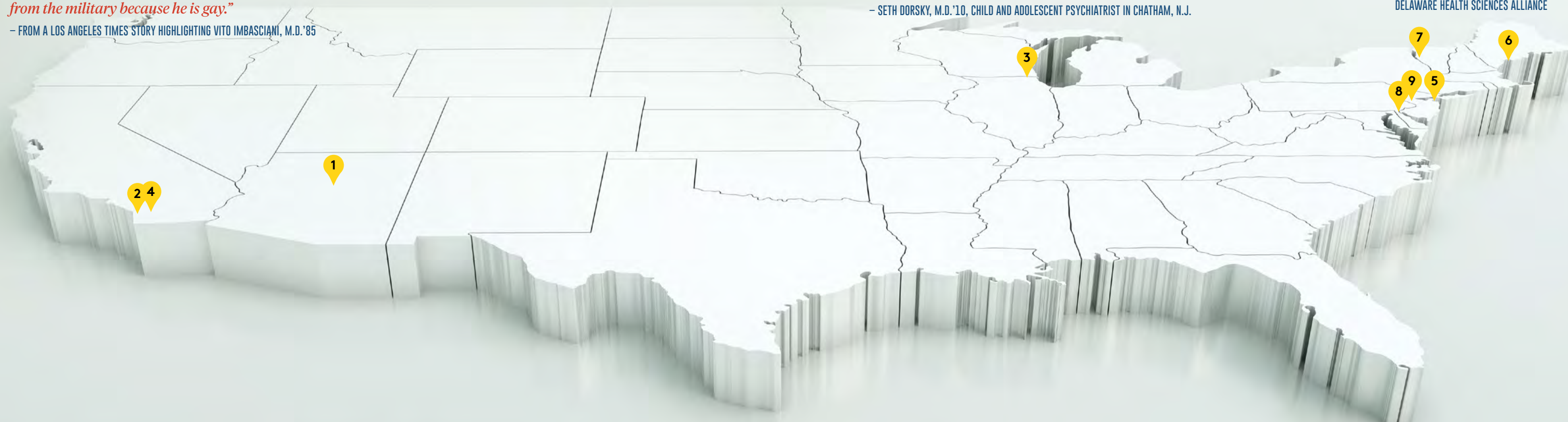
*"The whole world has changed in a few short weeks; both personal life and work life have taken on a completely different feel. What used to be rote, normal, hectic, and routine has become apprehensive and earnest, but also, to a certain extent, calm and serene. The pace of life has slowed, and the focus has narrowed. It is easy to forget that there is more to life and clinical practice than COVID-19."*

— KATIE DOLBEC, M.D. '10, EMERGENCY MEDICINE PHYSICIAN AT UVM MEDICAL CENTER AND ASSISTANT PROFESSOR AT THE LARNER COLLEGE OF MEDICINE

## Wilmington, Del. 8

*"I feel fortunate to be able to serve communities in need. I'm also grateful to work with exceptional people, many of whom work tirelessly behind the scenes and often don't get the credit they deserve."*

— OMAR KHAN, M.D. '03, PRESIDENT AND CEO OF DELAWARE HEALTH SCIENCES ALLIANCE





Dr. Akbarnia  
with her  
patient, Mr. C.



## The Heart of a Physician

When Dr. Akbarnia published the following post to Facebook on April 7, she had no idea it would be shared over 175,000 times, earning her an appearance on *Good Morning America* and a piece in the *L.A. Times*. By Halleh Akbarnia, M.D.'98

### FRONT LINES

I have been an emergency medicine physician for almost 20 years. I have worked through numerous disasters, and I'm used to the daily grind of heart attacks, gunshots, strokes, flu, traumas, and more. It's par for the course in my field. Yet nothing has made me feel the way I do about my "job" as this pandemic has—that knot-in-the-pit-of-your-stomach sensation while heading into work, comforted only by the empathetic faces of my colleagues who are going through the same. I am grateful for their presence, knowing they are both literally and figuratively with me, that they understand and accept so profoundly the risks we take each day. I also hope that my friends and family forgive me for my lack of presence during this time—precisely when we need each other most—and that they realize that their words, their encouragement, and their small gestures that come my way daily are the fuel that gets me through each day. This is a story for all of us.

I met my patient, Mr. C., on my first real "pandemic" shift, when what we were seeing that day was what we had been preparing for. He was classic in his presentation, his X-ray findings, his low oxygen levels...we just knew. And he was the nicest man I had met in a long time. Gasping for breath, he kept asking if we needed anything, and that it would all be okay. He told us he

was a teacher but that he was learning so much from us, and how much he respected what we were doing. The opposite could not be more true.

We had to decide how long we would try to let him work through this low oxygen state before needing to intubate him. His levels kept falling and despite all our best efforts it was time to put him on the ventilator. He told us he didn't feel great about this, but he said: "Doc, I trust you and am putting myself in your hands." That uneasy feeling in my stomach grew even more in that moment. But he, with his teacher's steady voice, kept me grounded, where I was supposed to be. I saw his eyes looking at me, seeing the kindness in them, even as we pushed the medications to put him to sleep. To say this was an "easy" intubation is an understatement. It was not. He nearly left us a few times during those first minutes, but he kept coming back. We fought hard to keep him with us. The patience and strength of my team that day was truly remarkable.

I handed him over to my friend and colleague, Dr. Beth Ginsburg, and her team in the ICU, and her calming voice reassured me that they had it from here. And then for the next twelve days, I waited and watched his progress, knowing the statistics, and how sick he was when he got to us. They did their magic, and just yesterday my new friend Mr. C was extubated.

**I HANDED HIM OVER TO MY FRIEND AND COLLEAGUE, DR. BETH GINSBURG, AND HER TEAM IN THE ICU, AND HER CALMING VOICE REASSURED ME THAT THEY HAD IT FROM HERE. AND THEN FOR THE NEXT TWELVE DAYS, I WAITED AND WATCHED HIS PROGRESS.**

I decided to go "meet" him again. Mr C. was in the COVID stepdown unit, recovering, without family. Nobody was allowed to visit him; even worse, his wife had been home alone in isolation for the past fourteen days, too. My heart broke thinking of how that must have been for her. I cautiously went into his room, donned in my PPE, and when he saw me, he stopped for a second. A moment of recognition. I introduced myself. "I'm Dr. Akbarnia, Mr. C. I was the last person you saw in the ER. You told me you trusted us to get you to this side. Looks like you did just fine." He started to cry. He said, "I remember your eyes." And I started to cry.

What he didn't know is that, at that moment, I realized that we do what we do exactly for people like him, for moments like these. His strength, his kindness, his calming words to me meant everything. At that moment, my heart (which had been beating over 100 bpm since this pandemic began) finally slowed down. I sat down and we talked. I told him that while he is here, we are his family. He will always have a place in my heart. And whether he knows it or not, he will be my silent warrior and guide as I take care of every patient, COVID or not. He will fuel me until the day I hang up my stethoscope.

Hyunsoo No,  
M.D.'19



## The Epicenter of a Pandemic

By Hyunsoo No, M.D.'19

After graduating from the Larner College of Medicine, Hyunsoo No, M.D.'19, headed to Flushing Hospital Medical Center in New York City for a preliminary medicine rotation prior to radiation oncology residency training at Stanford. As the COVID-19 pandemic hit New York City, he found himself at the front line. Twitter has been a way for him to share news, connect, and thank colleagues—on April 4 he tweeted: "We were

*able to get another person off a ventilator this morning as our shift was ending! Just our third thus far but after these rough few weeks, it feels so great to finally share some good news with families!"*

And on March 19: "To all the friends and family reaching out to check in, thank you! Working in the ICU throughout this has been trying but happy to be a part of a team working so hard to help those in need. Looking forward to seeing all these people discharged home!!"

Read more about No's experiences in Flushing, first published on the College's blog ([uvmmedicineblog.wordpress.com](https://uvmmedicineblog.wordpress.com)) April 20:

### FRONT LINES

These past few weeks certainly have been unexpectedly tough. Not only with the unknowns of how to combat coronavirus and how to help our patients, but the sadness of seeing patient after patient pass and seeing their families torn apart. It's been heart breaking, having to call families in the middle of the night to share unthinkable news, knowing they are unable to see their loved ones one last time due to visitation restrictions.

Additionally, in our hospital, more and more residents, nurses, and physicians were getting sick, leading to further under-staffing alongside a huge surge in the number of patients coming in. Atop of all that was the underlying fear of bringing all this home and getting our loved ones sick.

However, as with most things that are difficult, it began to ease up. Things are beginning to turn around. While people are still dying, the urgency and sheer volume has reduced. We are now discharging those patients who came in the initial surge and playing cheerful music when they get to go home, announcing it over our loudspeakers.

Our residents and physicians are coming back to work, and there's a small glimpse of normalcy. I recognize this is not yet over, and there is talk there may be another wave of this arriving, but it's nice to be able to help reduce this burden, even just a little bit.



Debra Leonard, M.D., Ph.D. and Beth Kirkpatrick, M.D.



## Solving Testing Challenges through Collaboration and Action

### LARNER RESPONSES

Early in Vermont's stay-at-home order phase, the state faced both a shortage of COVID-19 test materials and limited capacity to process tests.

As the only medical school and level one trauma center in Vermont, the Larner College of Medicine and University of Vermont Medical Center, respectively, quickly acted to address these challenges.

Between March and June, Larner scientists produced more than 37,000 vials of solution for use in COVID-19 testing. UVM Vaccine Testing Center research technicians took the lead in collecting transport media—a solution needed for COVID-19 specimen collection—from Larner laboratories. Then members of the UVM

medicine staff were organizing daily transport of tests samples from Boston's Logan Airport to Rochester, Minn., when they ran into a snag—flights were getting cancelled, which meant test results and important related clinical decisions were delayed. In a demonstration of true community collaboration, members of the medical center, UVM Health Network, Vermont Department of Public Safety, Green Mountain Messenger, JV Air LLC, and Heritage Flight rallied to secure a private jet to make the deliveries, ensuring 24-hour turnaround test results. This arrangement allowed Vermont to send up to 600 tests per day to Mayo, says Leonard, which was two to three times as many tests as Vermont had been previously sending.

An innovative research initiative, run concurrently with the test assembly effort, brought Larner virologists, pathologists, and infectious disease experts together to evaluate potential alternatives to the traditional RNA extraction kit, a key part of the COVID-19 testing process that has been in short supply. They tried two strategies: An alternative RNA extraction kit and an assay that omits an RNA extraction step altogether. Associate Professor of Medicine Jason Botten, Ph.D., Faculty Scientist Emily Bruce, Ph.D., and colleagues published the initial findings as a BioRxiv manuscript preprint. The experimental test has been replicated by labs all over the world with promising results. The team has since published a second preprint, a peer-reviewed article, and launched a collaborative multi-site international trial of the alternative tests.

**BETWEEN MARCH AND JUNE, LARNER SCIENTISTS PRODUCED MORE THAN 37,000 VIALS OF SOLUTION FOR USE IN COVID-19 TESTING.**

Medical Center Department of Pathology and Laboratory Medicine added swabs and other components and assembled the kits. Deborah Leonard, M.D., Ph.D., chair of pathology and laboratory medicine, and Beth Kirkpatrick, M.D., chair of microbiology and molecular genetics and Vaccine Testing Center director, provided leadership for the initiative.

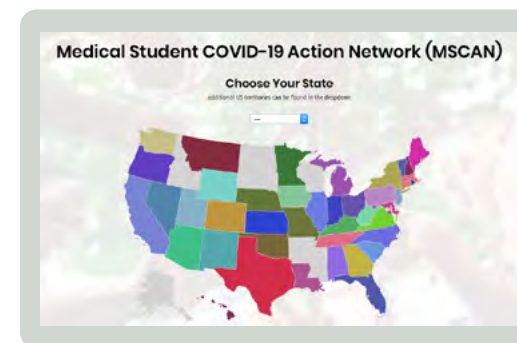
With limited laboratory personnel to process COVID-19 tests, Vermont turned to the Mayo Clinic Laboratories for help. UVM pathology and laboratory

## A COVID-19 Action Network Takes Shape

### LARNER RESPONSES

On March 13, as the COVID-19 pandemic swept through communities large and small, Vinh Le '23 founded the Medical Student COVID-19 Action Network (MSCAN) to help coordinate medical student-led volunteer efforts. With the help of 23 of his Larner classmates, he developed a list of contacts at every accredited U.S. medical school in the U.S. and began reaching out to them to gather data. The MSCAN database now contains hundreds of volunteer activities from 104+ schools in 40 states. The effort is supported by 57 medical students from the College and over 240 additional contributors.

The MSCAN database includes medical student-led volunteer activities across the U.S.



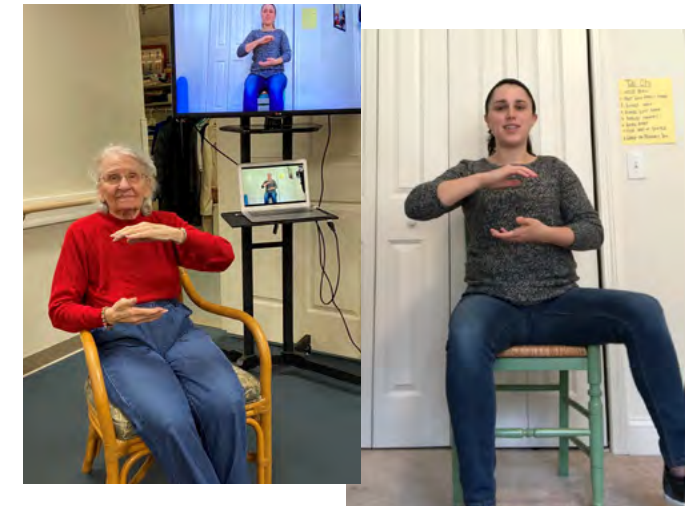
## Feeding Healthcare Workers

### LARNER RESPONSES

With clinical clerkships on hold in the early days of the COVID-19 pandemic, Gia Eapen '22 and Sylvia Lane '22 needed a way to feel useful. The LCOMcares Service Corps, a group of faculty, staff and students formed to help the community through this public health crisis, introduced them to Frontline Foods, a national organization that's uniting hospitals with area restaurants to feed healthcare workers. Financial donations from the community pay local restaurants to prepare individually packaged meals that are then transported to area hospitals. Eapen and Lane have been in charge of marketing for Frontline Foods' Vermont chapter, which boasts over 50 restaurants as members.



Gia Eapen '22



Claudia Russell '22 (right) teaches tai chi to Maria DesRochiers

## Connecting with Elderly Community Members

### LARNER RESPONSES

To help nursing home residents who can't have visitors during the COVID-19 pandemic stay connected and engaged, Larner College of Medicine students organized a series of virtual activities at Vermont facilities. With leadership from Claudia Russell '22 and Ashleigh Peterson '22, and with the guidance of Janet Nunziata, M.S., associate director of the UVM Center on Aging and coordinator of the Queen City Memory Café, students have hosted virtual sing-alongs, tai chi lessons, book readings and more for residents of nursing homes in Burlington, Bristol, Montpelier and other Vermont towns.

- Jhaimy Fernandez '21 educates residents of East Los Angeles, her hometown, about the proper way to wear a mask.
- Nathan Dow '23 returns to UVM Medical Center as an EMT, a job he held for five years prior to medical school.
- Jack Dubuque '21 renews his nursing license to pitch in while clinical rotations are suspended.

Read more at: [uvmmedicineblog.wordpress.com](https://uvmmedicineblog.wordpress.com)

MORE LARNER RESPONSES



*New Yorker*

## “The Engineers Taking on the Ventilator Shortage”

Jason Bates, Ph.D., Sc.D., professor of medicine, and Matt Kinsey, M.D., assistant professor of medicine

*National Public Radio “Morning Edition”*

## “COVID-19 Vaccine Shows Promise, Trump Takes Hydroxychloroquine”

Tim Lahey, M.D., M.MSc., professor of medicine

*Washington Post*

## “Which outdoor sports and athletic activities are safe during a pandemic?”

James Hudziak, M.D., professor of psychiatry and pediatrics and chief of child psychiatry

*MedPage Today*

## “Still Want to be a Doctor Post COVID-19?”

Op-ed co-authored by David Rettew, M.D., associate professor of psychiatry

*STAT*

## “Infect volunteers with COVID-19 in the name of research? A proposal lays bare a minefield of issues”

Beth Kirkpatrick, M.D., chair of microbiology and molecular genetics

*Vermont Public Radio “All Things Considered”*

## “Race, COVID-19 and Health Disparities in Vermont”

Maria Mercedes Avila, Ph.D., M.S.W., associate professor of pediatrics

*New York Times*

## “‘The Other Option Is Death’: New York Starts Sharing of Ventilators”

Joshua Farkas, M.D., associate professor of medicine

*NBC News*

## “Why have 14,000 people volunteered to be infected with coronavirus?”

Beth Kirkpatrick, M.D., chair of microbiology and molecular genetics

*New York Times*

## “In Harm’s Way”

Stephen Berns, M.D., associate professor of family medicine

*USA Today*

## “You’re not ‘too busy’ to stay active during quarantine: Health experts worry about blood clots, weight gain”

Mary Cushman, M.D., M.Sc., professor of medicine

*Associated Press*

## “Virus spike in Vermont city hits immigrant communities”

M.P.H. student Bidur Dahal

*MyNBC5*

## “UVM medical students connect virtually with nursing homes to combat loneliness”

Claudia Russell ’22 and Ashleigh Peterson ’22

*New York Times*

## Op-ed titled “An Unproven Vaccine Is Too Risky”

Tim Lahey, M.D., M.MSc., professor of medicine

*Science Friday*

## “Blood Clots Linked To COVID-19 Are Raising Alarm”

Mary Cushman, M.D., M.Sc., professor of medicine

*NBC10 Boston/New England Cable News*

## “Help Needed: VT Governor Calls All Hands on Deck to Aid Emergency Response”

Hillary Danis ’21

*WCAX*

## “UVM Researchers Studying Ripple Effects of Social Distancing”

Eline van den Broek-Altenburg, Ph.D., assistant professor of radiology





ILLUSTRATION: SHUTTERSTOCK/SPARKSTUDIO

## GOOD INCENTIVES

Family planning research connects Vermont and Uganda

In a rural hospital in Nakaseke, a district in central Uganda, two pieces of paper are tacked to the waiting room wall. One tells patients to bring their own toilet paper—the low-budget hospital can’t afford to provide any. The second lists the limited services the hospital offers, and the fee for each. A pregnancy test costs the equivalent of \$1.32; a “normal” delivery \$6.32; and a cesarean section followed by a tubal ligation comes to just shy of \$20. It seems inexpensive, but for the fact that most local women average monthly take-home pay of less than \$100.

In Uganda and other low-income countries, rapid-repeat pregnancies—defined by the World Health Organization as spaced less than 24 months between delivery and the start of another pregnancy—are a significant issue. Two years isn’t long enough for a woman’s body to get back to the peak nutritional status needed to support a pregnancy; her infant’s nutritional status is likewise at risk, given the possibility she will stop breastfeeding once she’s pregnant again. However, it’s a treatable issue.

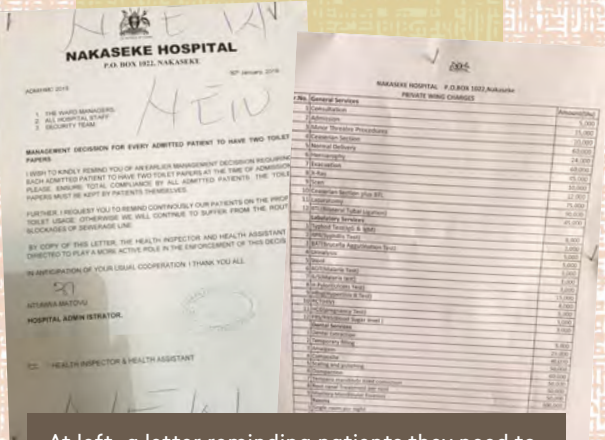
“Getting family planning into the hands of postpartum women is an international target,” says UVM Associate Professor of Obstetrics, Gynecology, and Reproductive Medicine Anne Dougherty, M.D. But how to successfully address the challenge, specifically in Nakaseke, the region of Uganda where Dougherty focuses most of her research?

The answer: by using financial incentives. It’s a method UVM Professor of Psychiatry and Psychological Science Sarah Heil, Ph.D., successfully used with a different population, Vermont women receiving treatment for opioid use disorders [see page 28]. Together, Dougherty and Heil, along with a team of Ugandans, adapted the intervention to understand how women in Nakaseke and elsewhere might reduce unintended pregnancies.

BY SARAH ZOBEL



Anne Dougherty, M.D.



At left, a letter reminding patients they need to supply their own toilet paper when they visit the hospital; and at right, a price list for procedures

Sarah Heil, Ph.D.



African Community Center for Social Sustainability (ACCESS)

**Dougherty** came to UVM in 2013 in part to start a global women’s health program within the Department of Obstetrics, Gynecology, and Reproductive Sciences. She developed medical student and resident education curricula that have since allowed many medical trainees to learn firsthand what it’s like to practice medicine at UVM partner sites around the world, particularly East Africa. In doing so, Dougherty cultivated relationships with local healthcare providers and others so fully that she now calls Uganda her home away from home, traveling there three or four times a year. In Nakaseke, about 40 miles from the capital, Kampala, she often collaborates with the African Community Center for Social Sustainability (ACCESS). In fact, it was in a meeting with ACCESS founder Robert Kalyesubula, M.D., a Yale-trained nephrologist, and others that Dougherty first considered a novel route to addressing the question of rapid-repeat pregnancy.

“We were talking about family planning and I thought, I’ve never seen behavioral economics, which is generally the use of incentives, used to increase health-seeking behavior around family planning in Uganda. They’ve used it in other ways, to incentivize hospital birth or childhood immunizations, but I haven’t seen it done in family planning,” says Dougherty. She turned to Heil, with whom she’d worked on a few smaller, unrelated projects, for the solution.

But finding a study approach was one thing; translating it across cultures was another. For that, they relied on ADAPT-ITT, an evidence-based process to alter an intervention for a new population or location—the first time it was used with family planning research.

“We had to understand, was the community receptive to research? Were there people there who would be able to administer a study? Really simple things: What does the consent process look like?” says Dougherty. She met with ACCESS stakeholders, as well as with providers at the nearby district hospital, including John Mundaka,

M.D., an obstetrician/gynecologist at Makerere University in Kampala. The team conducted surveys and organized focus groups to gauge local attitudes to both contraception and incentives, and used theater testing, relying on Ugandans who would be conducting the intervention, along with observers, to point out anything that might not translate culturally, inappropriate wording, and even whether the use of incentives would be welcomed and appropriate. There was pushback initially, with some saying financial incentives might be viewed as coercive, or that a woman might be given money, only to have her husband take it from her.

“We had to get them comfortable with [the idea] because they were going to be the ones doing the work,” says Heil. “If you do incentives wrong, they don’t work and it’s a waste of everyone’s time and effort and money.” Even Mundaka, whose training included a fellowship at McMaster University in Ontario, says the idea of paying people to come to the clinic seemed questionable at first. Eventually, however, with support from Uganda’s Institutional Review Board (IRB) and an understanding that incentives would be commensurate per capita with those offered in the United States, everyone was on board.

“[Women] would get a 10,000 Ugandan shilling voucher and then they could go to the local shop and buy flour or sugar or soap or diapers if that’s what they needed,” says Dougherty. “It gave them choice about what they could select. And it also gave the women the ability to have some more control over how it got spent.” The incentives had nothing to do with the actual use of contraception, but rather, were related to each woman’s attendance at information sessions. The education was provided one-on-one, as research showed Ugandan women preferred this format over group settings.

“The program is based on the assumption that if people have fact-based education and individualized counseling around family planning with multiple meetings—multiple points of contact—they

are more likely to accept family planning. What’s incentivized is coming for visits where you can talk about family planning and ask questions, and if you’re using family planning, someone can help you troubleshoot if you’re having side effects,” says Dougherty. Women could technically come to all three of the visits in the pilot trial, take the vouchers, and ignore everything related to family planning. “But as it turns out, when you do this kind of education and you address the locally held myths about family planning, you have an increased uptake in family planning use,” she says.

Another cross-cultural component that needed to be considered was traditional gender roles in Uganda, where two-thirds of married women report decisions around contraception are made either with their male partner or by the latter alone. Yet women have a greater knowledge base on the subject than men, who rarely get information from a healthcare worker. While men may understand some of the side effects of various methods of contraception, many are resentful, as when an injectable method causing bleeding, for example, necessitates additional trips to the hospital. In addition to not wanting to pay for those visits, a man may be upset by the interference to the couple’s sex life. Many men in Uganda also incorrectly fear contraceptives will lead to cancer.

Those beliefs were enumerated in a study Dougherty, Heil, and Mundaka published in 2018. Although the sample size of 178 was small, nearly all the men had heard of family planning. However, most did not get information from healthcare workers, but from radio ads and community events where religious leaders routinely speak about the use of contraception. For many men, long-acting reversible methods such as IUDs and implants were unfamiliar; they were most accustomed to male condoms, though some knew about birth control pills and injectables.

For the current study, outreach was geared toward encouraging the men to take an active role. The researchers hosted a couple of special local soccer matches, with a goat the trophy for one and soccer jerseys

**The researchers hosted a couple of special local soccer matches, with a goat the trophy for one and soccer jerseys going to the winner of the other. At half-time, nurses shared family-planning information.**

going to the winner of the other. At half-time, nurses shared family-planning information and took questions from the men in attendance. Throughout the study, men were encouraged to join their partners on their family-planning visits. Women whose partners opted not to come with them were provided with pictorial handouts describing different contraception methods and myth-busting information to bring home.

An early surprise finding was that even those women whose partners stayed away were able to make contraception decisions alone at their first visit. After that, the majority used some form of reversible and effective contraception: pills, injectables (the most commonly used form of contraception), implants in the upper arm, or IUDs. Given the relatively high rate of HIV in the area, condoms were offered at every visit, as was emergency contraception, which is not in widespread use.

Mundaka, who served as study site director, says family planning has not historically been a focus of Ugandans’ research, especially in rural areas like Nakaseke, where more than 75 percent of the population lives. He’s effusive in his praise of Dougherty and Heil: “They’re amazing people. The love and interest they have in having these key measures being improved in our country is quite amazing.”

And for Mundaka, working with the UVM researchers has helped him understand how to better meet the needs of his own patients.

“When we gave [study participants] a one-on-one based approach, giving them details of each of the methods and highlighting both the side effects and what can be done for all those side effects, they [were] convinced,” he says. Having time to ask questions helped even more, “an eye opener that we might go in a more focused, detailed manner in offering family-planning education—as opposed to a general approach of mass education awareness, which is failing us and failing the uptake and continuity” of contraceptive use. Because most ob/gyns are in urban settings, they don’t always grasp the reality of life



## BUILDING RAPPORT AND EARNING TRUST

While running a multi-site treatment trial for pregnant women with opioid use disorder in 2016, Sarah Heil, Ph.D., asked what she thought was a throwaway question: Was the pregnancy planned or unplanned? The trial was one of the largest ever done with that cohort—Heil and her team screened close to 1,000 women across eight sites. Looking back over the responses, she was stunned to see that 85 percent of those pregnancies were not intended. A third of the women said they'd wanted to conceive, just not at that time; another third had no interest in getting pregnant at all; and the final third say they didn't know.

"I thought, this is crazy. This is the 2000s—we've got more contraceptive methods available than ever before, more effective methods than ever before. That really surprised me in a very

**Looking back over the responses, she was stunned to see that 85 percent of those pregnancies were not intended.**

significant way," says Heil. It piqued her interest in helping women bring their family-planning activities in line with their intentions. Yet she could find little in the literature of helping women with substance use disorders prevent unintended pregnancies.

"I said what if we could just use incentives, not making it contingent on them using a method but on them coming back for visits where we could find out how it's going—'Are you having side effects? Are you having problems adhering to the method?'—with the idea that a lot of side effects can be treated or worked through. Sometimes it's just a matter of encouraging the woman to stick with it because a lot of side effects will also resolve on their own if the woman stays on the method long enough," says Heil.

Basing the intervention on recommendations from

the World Health Organization for minimizing barriers to contraception for women who want it, Heil provided six options—pills, patch, ring, injection, IUD, or implant—along with the incentives just for checking in. She housed the contraceptive service in a clinic just upstairs from the women's substance use disorder treatment clinic, making it easy for participants to stop by on one of their daily or weekly visits. That eliminated one of the main issues inherent in usual care, which is referral to a community family-planning provider: having to sort out child care, transportation, and how to pay for the visit and the contraception in addition to visiting the treatment clinic.

In her 2016 pilot trial with 30 women, Heil confirmed incentives work. She has since completed a larger trial, extending the observation period from six months to a year. Half the women

**"I thought, this is crazy. This is the 2000s—we've got more contraceptive methods available than ever before."**

— SARAH HEIL, Ph.D.

received contraception according to the WHO guidelines; the other half received contraception plus a financial incentive. Heil is currently completing a cost-effectiveness analysis of the different interventions, as well as reviewing her findings, which she says look promising.

"We just had that many more opportunities to talk with the women," says Heil. "Sometimes all we were talking about was how their day was or some issue they were having with their kids or their spouse or their parole officer or all the things that are going on in these women's lives, but we were building that rapport so the next time contraception came up, it was a little bit easier conversation to have."



John Mundaka, M.D.



for the majority of the population, or why family planning is so often underutilized. Mundaka has made a point of sharing that information with his gynecology colleagues, explaining that taking even as little as 10 minutes to talk about family planning with patients can have a positive effect.

"These same mothers are the ones that go out there and give the same knowledge or awareness we've given them to their most trusted friends," he says. Focused discussions with mothers have shown that women trust the information their friends provide—anyone who has used a particular method is automatically considered an expert. A woman who has successfully used an IUD, for example, could answer her friends' questions, and it would be seen as the "golden truth."

"It's the little discussions that we have with these mothers...that can take away the misconceptions that are in the community when they go out there and discuss with their friends," says Mundaka.

That's not unlike what Heil observed in her work with women with opioid use disorders, where trust and relationship building proved to be key factors in successful contraception adherence. Some women arrived for their first visit and didn't want to take anything from the team. But the incentives meant they came back three times more often than those who were not getting any such external motivation, giving them the chance to get to know and trust Heil and her colleagues. Also like in Vermont, co-location of services in Uganda was key. The family-planning clinic in Nakaseke was located next to the childhood immunization clinic. Women, who are far more likely to bring their infants and children for immunizations than get postnatal care for themselves, were referred to the family-planning clinic by immunization nurses.

There are challenges to working halfway around the globe. Although Dougherty is on site every three or four months, Heil has only been able to visit once, in March 2019. At all other times, they rely on Skype calls and Google Docs to keep track of each participant, her



ACCESS Maternal Child Health Extension

visits, her choice of contraception, and any complications.

"We could log in on a regular basis and see whether participants were coming in, and if so, what was happening with their methods," says Heil. "That way, if we saw something that was a little bit off, we could either email [the healthcare providers] or give them a call and try to work through that quickly instead of having to wait until everything was done."

They completed a single-arm trial with five women. Because all of the participants were using contraception right out of the gate, they halted the study and began a randomized controlled trial

with 20 women. Half received either the intervention or usual care, which simply directs a woman to the postnatal clinic when she leaves the hospital after giving birth. At least 90 percent of the women in the intervention arm were on some method of family planning by the study's conclusion; 60 percent were on a long-acting reversible form. The control group's numbers were also good, which Dougherty and Heil say suggests work done by ACCESS—including ongoing efforts by its village health teams, which travel to remote areas to raise awareness about family planning—is having an impact.

"[ACCESS] not only provides a lot of information and contraceptive services, they also have done a ton with kids who have been orphaned because of HIV, and in trying

to help those kids get educated and go on to school and a career and have that not be interrupted by an unintended pregnancy," says Heil.

Although in the short-term, Dougherty says they're focused on supporting their Ugandan colleagues in enhancing their response to COVID-19, in a country where there are 55 ICU beds for a population of 45 million, they are still looking ahead to more research. Dougherty and Heil are currently writing two papers analyzing their findings. They've also put in a request to the IRB for their next step: following the study participants' babies, to determine the effect of a mother's use of contraception on her infant's health and nutritional status. **VM**

**"It's the little discussions that we have with these mothers...that can take away the misconceptions that are in the community when they go out there and discuss with their friends."**

— JOHN MUNDAKA, M.D.



## President's Corner



**OMAR KHAN, M.D.'03**  
President  
UVM Medical Alumni Association

I did not anticipate the start of my role as helping lead the Medical Alumni Association to be marked by a global pandemic. Dare I say things can only improve from here? I am reminded of my time in Vermont, through medical school, residency and beyond and how it was marked as much by unpredictability as anything else. As a first-year student, everything seems simultaneously scary and wonderful (as a first-year resident, more of the same). And as a Vermont resident, seeing a beautiful sunrise the same day as driving through a 12-inch snowstorm gives one a new perspective on uncertainty. I feel like that now, with the uncertainty amplified several times over, and I am sure many of you do too.

As we all navigate the COVID-19 pandemic, I hope you also feel as I do the strength of our Larner College of Medicine family. Our medical education has prepared us for this moment. We are in this together.

In August, we welcome the newest class of medical students into our family. This year, the Medical Alumni Association has

partnered with Dean Page and Medical Student Education to provide each student a copy of *Make it Stick: The Science of Successful Learning*, a book that provides a sound introduction to the learning methods they'll be experiencing during their medical education. I'm eager to get to know members of the Class of 2024 through our White Coat note writing tradition, and I look forward to witnessing their transformation into the able and compassionate physicians the world needs right now.

Although Medical Reunion will look a little different this year, with a remote gathering in the works for the fall, I know it will be a fun-filled, joyous time of connection and celebration. We'll be celebrating our Medical Alumni Association award winners and get together online for talks and events. Most importantly, we will reflect on our time together in Vermont, plan for days yet to come, and appreciate the present more than ever.

I appreciate all of you, and all you do for your communities and for each other.

*Omar Khan*

## University of Vermont Medical Alumni Association

### Alumni Executive Committee

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Omar A. Khan, M.D.'03 (2020-2022)

##### VICE PRESIDENT

Mary Cushman, M.D.'89 (2020-2022)

##### SECRETARY

Michael D. Upton, M.D.'94 (2020-2022)

##### EXECUTIVE SECRETARY

John Tampas, M.D.'54 (Ongoing)

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Annie Coates, M.D.'07 (2018-2024)

Brian Cuniff, Ph.D.'07 (2020-2026)

Sean Diehl, Ph.D.'03 (2016-2022)

Seth Dorsky, M.D.'10 (2020-2026)

Janice M. Gallant, M.D.'89 (2015-2021)

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Christopher J. Hebert, M.D.'02 (2015-2021)

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Richard L. Page, M.D., Dean

Kevin McAteer, UVM Foundation

## REMEMBER INVEST INSPIRE

Do you remember when you received your first white coat? Do you recall the pride and excitement you felt on that day? Invest and inspire the newest members of the UVM Larner College of Medicine community with your gift and a special note of welcome and encouragement, which each student will discover in the pocket of their white coat this fall.

There's still time to sponsor a White Coat and support the Larner College of Medicine today!

Give online and write your note at  
[go.uvm.edu/givewhitecoat20](https://go.uvm.edu/givewhitecoat20)



## October 1-10

## COME TOGETHER—ONLINE—AT REUNION 2020!

For the safety and wellbeing of our whole community, UVM Medical Reunion is being transformed into an online celebration of you, the College's valued alumni, and the bond you share with your medical alma mater.

Since you can't at present come to the campus, the campus—and fellow classmates, and faculty friends—will come to you, with a full slate of activities:

*Medical Alumni Association Awards — 50th Reunion Celebration  
Zoom Cocktail Hours — "State of the College" Address — Med Student Panel Discussion — Campus and Simulation Lab Virtual Tours — CME Opportunities*

**PLUS**

All registrants receive a full bag of College swag!

See more details and registration options at: [go.uvm.edu/medreunion](https://go.uvm.edu/medreunion)





Share your news or updated contact information at [go.uvm.edu/infoupdate](https://go.uvm.edu/infoupdate), or contact your class agent, or the Larner Development & Alumni Relations office at [medalumni.relations@med.uvm.edu](mailto:medalumni.relations@med.uvm.edu) or (802) 656-4014.

1960s

REUNION 2020: 1965 + 1970

'65 **Jamie Jacobs** retired from active practice in 2007.

1970s

REUNION 2020: 1975 + 1980

'73 **Jim Betts** writes: "By the time you read this I'm hoping that the crest of the presence of COVID-19 will have long passed. This has been an unprecedented health threat. During the present time (March 25th) of composing this message to you, we are under a shelter-in-place throughout California, as I'm sure you are as well. During this mandate we are strictly following all safety protocols as my colleagues and I continue to provide medical-surgical care to our pediatric patients at UCSF Children's Hospital Oakland. Transitioning to our 'current summer-time' reading of this message: I encourage all of you to support our University with any donation you feel is possible. For those who attended our wonderful, seminal 50th undergraduate reunion last fall, and for me and the almost 40 percent of my College of Medicine Class of '73 who are also UVM 'double-degree graduates' and celebrated our 45th College of Medicine reunion in 2018, we saw that the campus has been truly 'transformed.' There are new buildings (academic, athletic-in-process, social, and residence halls), courses and curriculum. The overall 'look' of the campus is renewed and refreshing. Our new Alumni Center is in itself a magnificent transformation of our former Delta Psi fraternity house. I hope all of you can return to campus whenever possible. I wish you and your families good health and fulfillment in your lives and hope to see you all again in the not too distant future. Warmest regards, Jim '69, M.D.'73"

'77 **THINKMD**, a public benefit corporation founded by **Barry Heath** and Barry Finette, M.D., Ph.D., has released a free COVID-19 Personal Triage, Educational and Surveillance Tool. The tool, designed as a progressive web-based application, guides users through a COVID-19 self-risk assessment based on the latest published peer-reviewed World Health Organization and Centers for Disease Control and Prevention clinical data on presenting signs, symptoms and risk factors. THINKMD is working to distribute this tool globally with international health agencies and organizations, as well as directly to the public, and has established a special partnership with Mondia Media and their mobile network partners in Africa, South Asia, the Middle East, and beyond. Functional on any desktop, tablet, or mobile smartphone, the tool will be available in the near future to work offline in resource-poor areas.

1980s

REUNION 2020: 1985 + 1990

'89 UVM Professor of Medicine **Mary Cushman** received the Gender Equity Outstanding Achievement in Medicine and Science Award at the inaugural Larner College of Medicine Celebration of Gender Equity.

1990s

REUNION 2020: 1995 + 2000

'90 **Stephen Leffler** was featured in a cover story in the May 27, 2020 issue of *Seven Days*, the Vermont weekly, that talked about his leadership of the UVM Medical Center during the COVID-19 crisis.

'92 **Anders Gustaf Aulen Holm** was recently elected a Top Doctor in Otolaryngology for 2020 by *New Hampshire* magazine. Dr. Holm is an Otolaryngologist with Wentworth-Douglass Hospital in Dover, N.H.

2000s

REUNION 2020: 2005 + 2010

'00 **David Lisle**, associate professor of orthopaedics and rehabilitation at UVM, was accepted as a fellow of the American Medical Society for Sports Medicine (AMSSM). This designation is awarded to those that have demonstrated an ongoing commitment to lifelong learning, and the advancement of the profession of sports medicine in service to the AMSSM and leadership to the community.

'06 **Mattie Towle** says: "My practice has changed dramatically since the COVID-19 pandemic took off. I am a family physician at a large multi-specialty group in Bend, Ore., called Summit Medical Group-Oregon, Bend Memorial Clinic. I have had a patient I sent to the hospital with acute hypoxia who is recovering after an ICU stay from COVID-19. I don't think the situation has peaked here yet. I am conducting most of my visits online, which is helpful but has its limitations. A lot of care is being deferred currently, but can't be deferred indefinitely. Our IT team really rose to the challenge and got us set up for Virtual Visits very quickly. I have been outpatient based for eight years now, and I did register to do emergency credentialing at the hospital next door in the event they need more help.

2010s

REUNION 2020: 2015

'11 **Margaret Holmes** contributed a first-person story to *Bethesda Magazine*, titled "Coronavirus Chronicles: Born in the time of the coronavirus." She wrote about the birth of her first child, Olivia, while she and her husband, Phillip Lam, M.D.'11, worked as physicians during the pandemic. Read more: <https://bethesdamagazine.com/bethesda-beat/coronavirus-chronicles-born-in-the-time-of-the-coronavirus/>

'12 **William Timbers** has been named interim chief medical officer for Northern Inyo Healthcare District in Bishop, Calif. He has been a member of the NIHD medical staff as an emergency medicine physician since 2015. In addition to serving the community in the NIHD Emergency Department, he also co-owns and operates Eastern Sierra Emergency Physicians.

'13 **Katherine Areson** writes: "Chester Areson, M.D.'13, and I are living in Williston and just welcomed our third child, Jacqueline, last October. Chester is working up at Northwest Medical Center in Primary Care and I'm working with Maitri Healthcare for Women in OB/GYN. It is fun to be doing deliveries at UVM Medical Center, where I first decided to go into OB/GYN!"

SUBMIT CLASS NOTES ONLINE

The UVM Alumni Association now offers an easy-to-use online form to submit class notes. You can also browse class notes by year, school or college, or note type.

Submit your class note and read more from classmates: [go.uvm.edu/medclassnotes](https://go.uvm.edu/medclassnotes)



Jasmine Robinson, M.D.'20

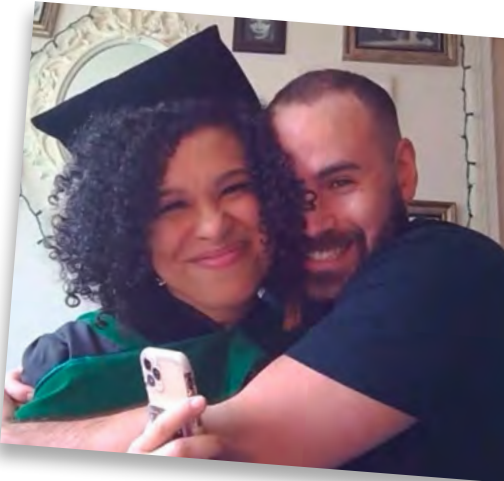
A Note of Thanks

In this ongoing series, Vermont Medicine shares a note of thanks from a student for the support they've received from alumni. **Jasmine Robinson, M.D.'20** gives thanks for scholarship support in her letter:

Dear Alumni,

I want to thank you from the bottom of my heart and express how appreciative I am of your generous gift. As a single parent in medical school, I have always been concerned about my projected student loans, and how to pay them off before my daughter goes to college (she's currently six). Your generosity has helped to ease some of those pressures, and both my daughter and I are extremely grateful!

All my love,  
Jasmine Robinson  
future OB/GYN



To support students like Jasmine, visit [go.uvm.edu/givemed](https://go.uvm.edu/givemed)

UVM CONTINUING MEDICAL & INTERPROFESSIONAL EDUCATION

UPCOMING CONFERENCE SCHEDULE

For information contact:  
**UNIVERSITY OF VERMONT CONTINUING MEDICAL EDUCATION**  
401 Water Tower Circle  
Suite 102  
Colchester, VT 05446  
(802) 656-2292  
[UVMCME@med.uvm.edu](mailto:UVMCME@med.uvm.edu)  
[www.med.uvm.edu/cme](https://www.med.uvm.edu/cme)

**WOMEN'S HEALTH AND CANCER CONFERENCE**  
Oct. 2, 2020  
VIRTUAL STREAMING (only)

**46TH ANNUAL FAMILY MEDICINE REVIEW COURSE**  
NEW DATES!  
October 5-7, 2020  
DoubleTree by Hilton Hotel  
Burlington, Vt.

**WILDERNESS MEDICINE CONFERENCE**  
NEW DATE!  
October 8, 2020  
DoubleTree by Hilton Hotel  
Burlington, Vt.

**NEUROLOGY FOR THE NON-NEUROLOGIST**  
October 23, 2020  
DoubleTree by Hilton  
Portland, Maine

**NORTHERN NEW ENGLAND NEUROLOGICAL SOCIETY ANNUAL MEETING**  
Oct. 23-24, 2020  
DoubleTree by Hilton  
Portland, Maine

**UVM MEDICAL CENTER CARDIOVASCULAR/VASCULAR FORUM**  
NEW DATE!  
December 7, 2020  
DoubleTree by Hilton Hotel  
Burlington, Vt.

**ANY ON-CAMPUS EVENTS IN THE NEAR FUTURE MAY BE SUBJECT TO CHANGE DUE TO COVID-19 PRECAUTIONS. VIRTUAL OPTIONS ARE AVAILABLE FOR MOST CONFERENCES.**





The Medical Alumni Association Awards are presented every year at the Celebration of Achievements Ceremony at Reunion. The Distinguished Graduate Alumni Award will be presented at the Dean's Celebration of Research Excellence.

2020 MEDICAL ALUMNI ASSOCIATION

# Awards

Full biographies of the awardees can be found at [med.uvm.edu/alumni](http://med.uvm.edu/alumni)



## DISTINGUISHED ACADEMIC ACHIEVEMENT AWARD

Presented to alumni in recognition of outstanding scientific or academic achievement.



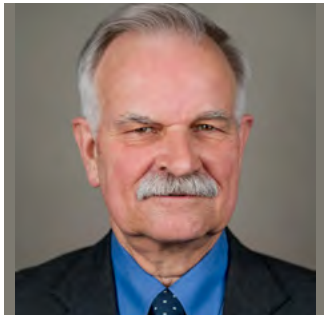
**John F. Beamis, Jr., M.D.'70**  
Emeritus Chair of the Division of Internal Medicine and Emeritus Chair of the Department of Pulmonary and Critical Care Medicine at the Lahey Hospital and Medical Center, Burlington, Mass.



**Deborah Cook, M.D.'90**  
Professor, Department of Pathology & Laboratory Medicine, UVM Larner College of Medicine; Director of Dermatopathology and the Dermatopathology Fellowship Program, Department of Pathology & Laboratory Medicine, UVM Medical Center



**Jeffrey Lawson, M.D.'90**  
President and CEO, Humacyte Incorporated, Professor of Surgery and Director, Vascular Surgery Research Laboratory, Department of Surgery and Division of Vascular Surgery and Professor of Pathology, Department of Pathology, Duke University Medical Center, Durham, N.C.



**Andrew Parent, M.D.'70**  
Retired Professor and Chairman Emeritus, Department of Neurosurgery, The University of Mississippi School of Medicine



## SERVICE TO MEDICINE AND COMMUNITY AWARD

Presented to alumni who have maintained a high standard of medical service and who have achieved an outstanding record of community service or assumed other significant responsibilities not directly related to medical practice.



**Diana Barnard, M.D.'90**  
Assistant Professor, Department of Family Medicine, UVM Larner College of Medicine and Division of Palliative Medicine, University of Vermont Health Network-Porter Medical Center



**Vito Imbasciani, M.D.'85**  
Secretary of the California Department of Veterans Affairs; Urologic surgeon, Department of Urology, Kaiser Permanente Medical Center



## DISTINGUISHED GRADUATE ALUMNI AWARD

Presented to an alumnus/a from the UVM Larner College of Medicine's Ph.D. or M.S. programs who has demonstrated outstanding achievement in basic, clinical or applied research; education; industry; public service/humanitarianism; and/or outstanding commitment to the Larner College of Medicine community.



**Marilyn Cipolla, Ph.D.'97**  
Professor, Department of Neurological Sciences, UVM Larner College of Medicine

## 2021 Nominations

Do you know a class member deserving of recognition? Send in your nominations for the 2021 awards to: [med.uvm.edu/alumni](http://med.uvm.edu/alumni)



## A. BRADLEY SOULE AWARD

Presented to an alumnus/a whose loyalty and dedication to the Larner College of Medicine most emulate those qualities as found in its first recipient, A. Bradley Soule, M.D.'28.



**Frederick Mandell, M.D.'64**  
Associate Clinical Professor of Pediatrics, Harvard Medical School; Senior Associate in Medicine, Children's Hospital, Boston

When a pre-medical student asked Dr. Mandell what it mean to be a doctor, he said: "To be a doctor, in the true sense of the word, is to use that almost mystical combination of science and a kind heart to make decisions; to give ear to the voice

of the patient and to respond to those who call out to us. That is what gives doctors the thumping heart to believe in what they have to do. This was the signature of my medical school and the roll of the drums that set me off."

Although Dr. Mandell entered medical school wanting to be a surgeon, he left as a pediatrician with guidance from his mentor, Dr. Jerry Lucey. While serving as a pediatric resident at Children's Hospital, Boston, Dr. Mandell found his passion in serving the underserved, caring for children of Boston's Romani community. Dr. Mandell was invited to join the medical staff at Children's Hospital, Boston, and received an appointment at Harvard Medical School. He founded the Massachusetts Center for Sudden Infant Death Syndrome (SIDS) and became vice chair of the National SIDS Foundation. Dr. Mandell served on the American Academy of Pediatrics and Indian Health Service research teams investigating possible causes for the high rate of SIDS on Native American reservations. In honor of his commitment to the health needs of The Tribal Nations, and his over 20 years of work with the Lakota Sioux, Dr. Mandell was presented their highest award, the Eagle Feather, at the Kicking Bear PowWow.

His continued interest in native peoples led him to work with the Chacahpoya Indians and the Huaorani people in the Amazon, as well as with Project Hope to build a Children's Hospital in Pudong, China. The Boston Chasidic Community honored him with their Award for Humanitarian Service. In addition, he continues to provide pediatric care at a rural clinic in Nicaragua.

A past president of the Alumni Executive Committee, Dr. Mandell has received UVM's Lifetime Achievement Award and the Larner College of Medicine Service to Medicine and Community Award. Harvard Medical School awarded him the Dean's Lifetime Achievement Award. In his hometown, he was the recipient of their Native Son Award. Dr. Mandell has authored numerous scientific papers, served as editor of *Pediatric Alert*, and published three works of historic fiction.

Says Dr. Mandell: "Over the years I have learned more than I have given. The medicine men I have met have influenced my life in their wisdom and their understanding of disease and cures. Their poignant message transcends culture, "Every person you touch has a soul."



## ROBERT LARNER, M.D.'42 STUDENT AWARD

Presented to a current student(s) for his or her outstanding leadership and loyalty to the College and one who embodies Dr. Larner's



**Sidney Hilker**  
UVM Larner College of Medicine, Class of 2021

dedication to not only supporting his medical alma mater, but to inspiring others to do so as well.



## EARLY ACHIEVEMENT AWARD

Presented to alumni who have graduated within the past 15 years in recognition of their outstanding community or College service and/or scientific or academic achievement.



**T. Mike Hsieh, M.D.'05**  
Director of Male Fertility and Men's Health Center; Assistant Professor of Surgery, Department of Urology, UC San Diego Health System



**Heidi Schumacher, M.D. '10**  
Assistant Superintendent, Health and Wellness, Washington, D.C. Office of the State Superintendent of Education





UVM'S HEALTHCARE HEROES ARE 'DARN TOUGH'

UVM Health Network employees on the front lines of the COVID-19 pandemic now have a supply of Darn Tough socks to keep them comfortable through long days on their feet thanks to a generous gift from the Vermont company.

In April, the Northfield-based company donated 5,000 pairs of socks to the UVM Medical Center and other UVM Health Network affiliates including Porter Medical Center and Central Vermont Medical Center.

The donation highlights the giving spirit of Vermonters and the deep respect healthcare professionals enjoy in the community.

"Darn Tough is a great Vermont story and we think this is a wonderful way to make a connection between a company like Darn Tough and a place like the UVM Health Network," says **Kevin MacAteer**, chief development officer for academic health sciences at the UVM Medical Center Foundation. "So thank you, Darn Tough. We really appreciate it. Our health care heroes are 'Darn Tough,' and we love having your socks."



SUPPORTING DIVERSITY, EQUITY AND INCLUSION

When she was growing up, UVM Professor of Neurological Sciences **Diane Jaworski, Ph.D.**, remembers her parents bringing her to volunteer at a soup kitchen, one of many ways they encouraged their daughter to give back. Her father, Witold "Victor"

Jaworski, a Polish displaced person who immigrated to the U.S. after World War II, and her mother, Jane (nee Czyzewski), who was born in the U.S. to Polish immigrants and wanted to be a nurse, but could not afford university, always stressed the importance of education and service to others. They would tell their children: "You may not have what you want, but you have what you need. Many don't have what they need. We need to help them."

This generosity of spirit inspired Jaworski to create a new fund at the Larner College of Medicine, named for her parents, the first specifically for the Office of Diversity, Equity and Inclusion (ODEI). In addition to supporting ODEI-specific initiatives, the fund allows ODEI leaders to allocate dollars to a variety of student groups engaged in advocacy.

In her 25-plus years at UVM, Jaworski has been at the front lines of diversity and equity work: She serves as an advisor to the American Medical Women's Association and the Social Justice Coalition (SJC) and is a member of the Dean's Advisory Committee for Diversity and Inclusion. The medical students she mentors—particularly the student-led SJC, a group that has worked with faculty to weave teaching about social justice into the curriculum—inspire her to stay engaged.

"I see the wonderful work the SJC is doing with the health disparities curriculum," she says. "I want to support those efforts."

Give now to the Office of Diversity, Equity and Inclusion:  
[go.uvm.edu/giveodei](https://go.uvm.edu/giveodei)



Vito Imbasciani, Ph.D., M.D.'85

MENTORING THE NEXT GENERATION

**Adam Ross '22** keeps a piece of paper tacked to the wall above his desk. It's a brief note from **Vito Imbasciani, Ph.D., M.D.'85**, that Ross discovered tucked in the pocket of the white coat he received as a first-year Larner College of Medicine student in September of 2018. For the last few years, Imbasciani and other Larner alumni have delighted in writing notes to the College's newest medical students, to be discovered during the white coat ceremony.

"I appreciated that someone was willing to reach out as an alum—someone who might be able to help guide me," Ross says. As it turned out, the two had much to bond over, starting with the fact that Imbasciani—who practices urology with the Southern California Permanente Medical Group—lives in Los Angeles. Ross is a native of the city. In addition, Ross, who hopes to engage in policy work, has been interested to learn about that aspect of Imbasciani's current position as secretary for the California Department of Veterans Affairs. Even more significantly, Imbasciani's long-time support of underserved populations resonated with Ross.

"I'm one of the few men of color in my class, and his work to increase diversity in classes has been inspirational," says Ross, adding that he hopes to incorporate community outreach in his own practice. He says having "Uncle Vito" as mentor has been "eye-opening and frame-shifting."

Imbasciani's munificence grew in part out of his experience as a 28-year officer in the U.S. Army Medical Corps; he completed four tours of duty in Iraq and Afghanistan and was forced to keep his sexuality hidden. In 2014 at Larner, Imbasciani and his husband, George DiSalvo, founded their eponymous endowed LGBTQ lecture series to address disparities in healthcare delivery within that community; it was the first of its kind in the nation. More recently, Imbasciani and DiSalvo established an endowment to increase diversity at the Larner College of Medicine.

Of his philanthropy, Imbasciani says, "I do it out of a sense of gratitude, to pay back. The best way of doing that is to give opportunities to people just starting their career in medicine. I do it by mentoring, and by trying to reduce their financial burden, so they can become more effective more quickly when they graduate."

To give online today, visit: [go.uvm.edu/givewhitecoat20](https://go.uvm.edu/givewhitecoat20)

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Flashback



Group Focus

Something very interesting is going on here, even if those of us decades later cannot tell what's down on the table in front of these medical students of long ago. Hopefully one or more of these people will break their concentration and tell us all what exactly was going on in this classroom, when and where it happened, and who were their classmates and their instructor.

Send your thoughts to [erin.post@med.uvm.edu](mailto:erin.post@med.uvm.edu) and we'll include them in the next issue of *Vermont Medicine*.

FROM THE PREVIOUS ISSUE



◀ The consensus on the Spring 2020 photo is that the very tired looking woman leaning against the counter is Mary Maloney, M.D.'77. Facing away from the camera is likely the late Jane Wolf, M.D.'77. The mustachioed gentleman is the subject of some debate: he could be Mark Rolerson from the Class of 1978, or Dr. David Frantz, or then-intern Peter McElfresh. Mary Maloney ID's him as "David Miller, if memory serves me well. I was on my medicine AI, and we were admitting late at night. He was reviewing the old records, and I was trying to stay awake." Howard Nadworny '78, noted that Mary Maloney "was also an amazing goalie for the women's intramural hockey team. My recollection is that she was never scored on."

In addition to Drs. Maloney and Nadworny, thanks to Allan Freedman '77, Susan Snyder '77, George Boccia '73, Delia Manjoney '77, and Michael Hermans '78 for their contributions.



**'52 William A. Eddy**  
Dr. Eddy, age 94, of Framingham, Mass., died March 31, 2020. Born in Hartford, Conn., he was a radiologist who worked at Framingham Union (Metro West) Hospital, Saint Vincent Hospital in Worcester, and in private practice. Dr. Eddy received his undergraduate and medical degrees from UVM. He served as a radar specialist in the Navy during World War II. Dr. Eddy loved his work and practiced medicine until the age of 86. He was known for his astute radiologic diagnostics, honesty and integrity.

**'53 Richard Charles Wolff**  
Dr. Wolff died February 27, 2020. Born 21 January 21, 1924, in Caldwell, N.J., he enlisted in the U.S. Army in December of 1941. He was activated at New York University as a meteorology student in 1943 and was commissioned a second lieutenant in the Army Air Corps. He was stationed at Douglas Army Airbase as a meteorologist before moving to the 1333 Air Force Base Unit in Chabua, India. Although mustered out from active duty in 1946, he remained as a reserve officer in the Army Air Corps.

After graduating from UVM with his medical degree, Dr. Wolff completed an internship at Syracuse University Hospital and an anesthesiology residency at the Hospital of the University of Pennsylvania (HUP). While there, Dr. Wolff activated in the Air Force and was promoted to captain. He spent one year teaching at HUP before transferring to the Clark Field Hospital in the Philippines, where he served as chief of anesthesiology.

In 1960, he became chief of anesthesiology at MacDill Air Force Base, training with NASA in support of the Astronaut Recovery Program. With every astronaut flight on Mercury, Gemini and Apollo missions, a team composed of a surgeon, an anesthesiologist and a surgical corpsman was stationed on U.S. Navy ships in the Atlantic and Pacific oceans to recover the returning astronauts and perform any emergency medical procedure indicated.

In 1961, Dr. Wolff was sent to Wilford Hall U.S. Air Force Hospital to develop and command the new Aerospace Clinical Research Laboratory, and he came to San Antonio with the Mercury 7 astronauts. He transferred to Foreign Technology

at Brooks Air Force Base as chief analyst from 1965 to 1968. After serving as dispensary commander at Kirtland Air Force Base, he moved to Teheran, Iran to serve as ARMISH MAAG Hospital Commander from 1969 to 1971. He also served as chief of hospital services at Mather Air Force Base.

Retiring as full colonel in 1972, he joined the teaching staff at UTHSCSAT, and was a consultant in anesthesiology at Audie Murphy VA and Kerrville VA hospitals. He initiated utilization review and quality assurance programs at all three hospitals. He was Board Certified in Quality Assurance and Utilization Review in 1977. Dr. Wolff also started the anesthesia department at NE Baptist Hospital.

**'55 Albert A. Romano**  
Dr. Romano died December 17, 2019. Born October 11, 1927, he served in the U.S. Navy as a hospital corpsman from 1945 to 1947. After receiving his medical degree from UVM, he completed his internship in Beverly, Mass., and moved to Agawam, Mass., to build his family medicine practice. After 60 years in private practice, he retired at 87 years of age.

**'60 Robert Clifton Parker**  
Dr. Parker died May 15, 2020, at his home in Indiana at the age of 86. Born and raised in Vermont, he received his medical degree from UVM and served as a captain in the Army Reserve. Dr. Parker spent three years stationed in Tehran, Iran, after medical school as a pediatrician and general medical officer with the United States Army Reserve, ARMISH-MAAG, from 1963 to 1965. He was a practicing pediatrician in upstate New York and then Morrisville, Vt. Dr. Parker earned his master's degree in public health from the University of Minnesota in 1981 and transitioned to hospital administration, first at Copley Hospital in Morrisville and then the Rutland Regional Medical Center in Rutland. He assumed the position of senior vice president for medical affairs at the Indiana Regional Medical Center. He also acted as interim president and CEO for a period before retiring in 2000. As the only pediatrician in Morrisville, he focused on providing care to the community, sometimes accepting cords of wood as payment. As a

hospital administrator, Dr. Parker focused on access to quality healthcare. He was proudest of his work with the Indiana Regional Medical Center establishing facilities in rural areas that lacked care options. He continued to serve in the community and volunteered with the Red Cross—as a member of the board of directors of the Red Cross of Indiana County and deploying to assist during hurricanes Katrina and Rita.

**'61 Donald Skinner Bicknell**  
Dr. Bicknell died March 2, 2020. Born August 16, 1935, he received his medical degree in 1961 and interned at Upstate Medical Center in Syracuse, N.Y., before entering the U.S. Army Medical Corps. He returned to Vermont in 1964 and set up his medical practice in Vergennes in the family home on Main Street. When his son, Tim, joined his practice in 1995, another son, Peter, built a new office on North Street. This became Little City Family Practice. In 50 years of practicing medicine in Vergennes, Dr. Bicknell grew the office from a solo practitioner to over 20 staff. He mentored countless medical students and residents. Dr. Bicknell continued to make house calls and meet patients at the office on weekends until the end of his career at the age of 77.

In 1979, Dr. Bicknell enlisted in the Vermont Army National Guard and served as Commander, Medical Company, 186 Forward Support Battalion. In 1995, he retired as a full colonel and state surgeon, having received the Army Commendation Medal and the Meritorious Service Medal.

His professional awards and achievements include co-authoring a *New England Journal of Medicine* article on tularemia published in 1968. In 2004, he was the recipient of the UVM Larner College of Medicine's Co-Family Medicine Doctor of the Year; in 2006, he received the Service to Medicine and Community Award from the UVM Larner College of Medicine; and in 2016 was a recipient of the State Community Service Legislative Recognition.

**'65 Mazzini Bueno**  
Dr. Bueno, known as “Nini” in Brazil and “Max” in the U.S., was born in Rio de Janeiro, Brazil, on August 23, 1937. He died on February 20, 2020, at the age of 83. In 1956,

he immigrated to the United States to continue his education at UVM, receiving his undergraduate degree in 1960 and his medical degree in 1965. Dr. Bueno was an intern at the Rhode Island Hospital in Providence, R.I. He became a U.S. citizen in 1962 and was a Vietnam veteran, serving as a captain in the U.S. Air Force. He was stationed at Sewart Air Force Base in Smyrna, Tenn., from 1966 to 1968.

Upon completing his military service, he became a radiology resident at Dartmouth Medical School, and attended a fellowship program at the Armed Forces Institute of Pathology at the Walter Reed Army Medical Center. Dr. Bueno completed his residency in 1971 and was board certified in radiology in 1972. He specialized in diagnostic radiology.

In 1971, Dr. Bueno joined Valley Radiologist Professional Association in Charlestown, N.H. From 1971 to 1992, he worked as a radiologist at several hospitals in New Hampshire and Vermont, including Valley Regional Hospital, Mt. Ascutney Hospital, Alice Peek Day Hospital and New London Hospital. For many years, he served as a member of the board of Mt. Ascutney Hospital and Valley Regional Hospital. In April 1974, he co-founded one of the first mammography programs in Northern New England at Valley Regional Hospital.

Dr. Bueno continued to practice as a radiologist at Hillcrest Hospital in Pittsfield, Mass., from 1993 to 1997, then at Harrington Memorial Hospital in Southbridge, Mass., until December 2007, when he retired. In 2009, Dr. Bueno returned to Rio de Janeiro where he resided until 2014, when he returned to New Hampshire. Since 2019 and until his death, Max resided at the Historic Homes of Runnemed in Windsor, Vt.

**'65 Marlene Ann Aldo-Benson**  
Dr. Benson died November 24, 2019, at the age of 80. She graduated from medical school summa cum laude and was a member of Phi Beta Kappa and the Alpha Omega Alpha honorary medical society. Dr. Benson helped to found the rheumatology division at the Indiana University Medical Center. She was respected and beloved by patients and colleagues alike as a talented physician, teacher, and internationally recognized biomedical researcher.

**'74 Jeffrey Adrian Schumacher**  
Dr. Schumacher died at home in Morrisville, Vt., on May 26, 2020, at the age of 71. Born January 4, 1949, in Yonkers, N.Y., he was raised in Burlington, Vt. After graduating from Yale University in 1970, he returned to his home state to enroll in medical school at UVM. There, he met his wife and classmate, Cajsja Nordstrom. He was able to experience all three of his children—Erika Schumacher, M.D.'08, Heidi Schumacher, M.D.'10 and Ryan Schumacher, D.O.—join their parents as physicians. Dr. Schumacher practiced pediatric medicine in Albany for 33 years, after he and Cajsja completed their pediatric residency training at the University of Colorado Health Sciences Center. Dr. Jeff, beloved by his patients and parents, was passionate about the health of all children. He lent his time and energy to a number of boards and committees in the capital region of New York State, with the goal of promoting the health and safety of children. Contributions may be made in Dr. Schumacher's honor to the Schumacher Family Endowed Fund in Pediatrics, established to support UVM pediatric faculty and trainees in continuing to lead the development of best practices in pediatric care and teaching.

Donations may be made online at [go.uvm.edu/schumacher](http://go.uvm.edu/schumacher) or via check (memo-line: Schumacher Family Endowed Fund in Pediatrics) to the UVM Foundation, 411 Main St., Burlington, VT, 05401.

**'90 James P. Bradley**  
Dr. Bradley died March 27, 2020 at the age of 57. Born August 10, 1962, he graduated from the U.S. Army Military Academy with honors in 1985. He was so proud of attending West Point that he wore his entire dress uniform to his medical school interviews. He earned his medical degree in 1990 as well as the additional honor of being the first doctor in Bradley family history. Dr. Bradley completed his residency in internal medicine and fellowships in pulmonary disease and critical care medicine at Brooke Army Medical Center in Fort Sam Houston, Tex. He achieved the rank of lieutenant colonel.

Dr. Bradley spent seven years as an Army physician practicing at William Beaumont Army Medical Center in El Paso, Tex., where he

served as medical director to the respiratory therapy department and the Sleep Disorders Center. He served as assistant chief to the department of medicine and the pulmonary/critical care department, and he was on the Department of Medicine Medical Education Committee. Dr. Bradley relocated to Las Cruces, N.M., where he added sleep medicine to his triple board certification in internal medicine, pulmonology, and critical care. He opened three successful sleep labs, worked at Memorial Medical Center as the director of the respiratory therapy department, and continued his practice in pulmonology and critical care.

In 2013, Dr. Bradley was instrumental in the creation of Lovelace Medical Group in Albuquerque. He was the director of the Lovelace Sleep Center, sleep medicine department, emergency department, and radiology laboratory at Lovelace Westside Hospital. He earned the title of “Provider of the Year” for two years in a row from the city of Albuquerque. As a pulmonary and critical care intensivist, he was selected for the chief of staff position. He took great pride in his role as the director of hospice and often took his children along with him to visit his most beloved patients, a fine example of his empathy, compassion, and kind-hearted nature. Most recently, he helped Lovelace achieve the Best for Quality 2019 Ardent Services Award and was the ICU physician in charge of treatment for isolated COVID-19 patients. Dr. Bradley was a member of the American College of Physicians, the American College of Chest Physicians, and the American Thoracic Society. He has received numerous honors for his work, including a nomination for White House physician by the Pulmonary/ Critical Care consultant to the Surgeon General.

**'10 Melinda (Mindy) Cherie Myzak**  
Dr. Myzak died May 15, 2020. Born on July 12, 1979 in Portland, Ore., she obtained a B.A. from Scripps College in 2001, followed by a Ph.D. in molecular and cellular biology from Oregon State University in 2005. She was recognized as a graduate fellow at the Linus Pauling Institute, published extensively, and was awarded several young

investigator awards for her impactful research. Most notably, she discovered a novel mechanism for the cancer chemoprotective effects of sulforaphane. In 2010, she graduated from UVM with a medical degree and completed her internal medicine residency at Oregon Health & Science University. When not in the laboratory or the hospital, Dr. Myzak could often be found leading study sessions for her medical school colleagues. Following a fellowship in oncology at Johns Hopkins University in 2016, she completed an advanced fellowship with the Mayo Clinic in 2017. She further pursued work researching cancer medications and treatment at AbbVie in Chicago and San Francisco. Dr. Myzak had a lifelong passion for the fight against cancer, spurred by the passing of her grandmother in her youth. She was dedicated to her patients, who she considered family, while at the same time working hard to translate new scientific discoveries into patient care.

**George “Ted” Winfield**

Ted Winfield died on Monday, March 23 after contracting COVID-19. A graduate of Haverford College with an M.P.H. from the University of California at Berkeley, he was for many years, beginning in the 1990s, associate dean for finance at UVM's College of Medicine. He was looked upon as a consummate administrator who played a key role in supporting the expansion of the College's research and educational facilities and curricular reforms, among other accomplishments.

Ted went on to serve the University as vice president for budget and resource management, and was later called out of retirement to help form and temporarily lead the Academic Health Sciences unit of the UVM Foundation and UVM Medical Center Foundation. Commenting on his passing, Dean Rick Page said: “The good work that Ted did for this College, the University, and the wider community will continue to be felt long into the future, and I know I speak for so many in our community when I extend our deepest condolences to Ted's family.



**'22 Collins Oguejiofor**

The Larner College of Medicine community was shaken by the sudden and unexpected death of Collins Kodilinye Oguejiofor, a member of the medical class of 2022, on June 22, 2020. Collins died in Norwalk, Conn., where he was preparing to begin his clinical clerkships at the Larner branch campus at Nuance Health. He was 29 years old.

Collins graduated from I.H. Kempner High School in Sugar Land, Texas in 2010. He later attended the University of Texas at Austin and graduated in 2014 with a degree in mathematics.

Collins is survived by his parents, Kenneth and Chinyere Oguejiofor; siblings, Kenneth (and his wife, Courtney), Ike, Vivian, and Amy Oguejiofor; grandmother, Josephine Ochiagha; and a host of aunts, uncles, and cousins.

“We know we speak for the entire community when we extend our deepest condolences to Collins’ family,” said Dean Rick Page and Senior Associate Dean for Medical Education Christa Zehle in a June 23 message to Larner students, faculty and staff. “Our sincere thoughts of care and sympathy also go out to his classmates, friends, faculty and staff who knew and worked with him, both in Vermont and in Connecticut.”

A memorial service was held July 11, 2020 in Issaquah, Washington, to commemorate Collins’ life, and a physically-distanced memorial vigil was held outdoors at UVM on July 14.

To honor the memory of Collins and in lieu of flowers, the Oguejiofor family requests that donations be made to support Larner diversity scholarships at: [go.uvm.edu/collins](http://go.uvm.edu/collins)





**June 5, 2020**

**1:10 P.M. – 1:18:46 P.M.**

Staff and students at the University of Vermont Medical Center and the Larner College of Medicine, masked and spaced 6 feet apart, silently take a knee for eight minutes and 46 seconds on June 5, 2020, in support of #WhiteCoatsForBlackLives. The brief vigil—marking the amount of time George Floyd was held down by police—was part of a national call to action by medical students focused on police brutality and systemic racism.

PHOTO: RYAN MERCER





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## 8 Commencement 2020

The College welcomed the new physicians of the Class of 2020 in a totally new way: through the most extensive live online commencement ceremony held at a medical school during the pandemic.



## 10 The Pandemic

Faculty, staff, students and alumni are rising to the challenges presented by the COVID-19 pandemic through leading edge research, compassionate patient care, and innovative community outreach.



## 24 Good Incentives

Anne Dougherty, M.D., and Sarah Heil, Ph.D., along with a team of Ugandan colleagues, adapted an intervention used in Vermont to understand how women in Nakaseke, Uganda, might reduce unintended pregnancies.

